

COHERENT INC
Form 424B7
October 10, 2006
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Registration No. 333-135669

PROSPECTUS SUPPLEMENT NO. 1

(TO PROSPECTUS DATED OCTOBER 6, 2006)

2.75% Convertible Subordinated Notes due 2011

Common Stock Issuable upon Conversion of the Notes

This prospectus supplement supplements the prospectus, dated October 6, 2006, relating to the resale by selling securityholders of up to \$200 million aggregate principal amount of 2.75% Convertible Subordinated Notes due 2011 and the shares of common stock issuable upon conversion of the notes.

This prospectus supplement should be read in conjunction with the prospectus, and is qualified by reference to the prospectus, except to the extent that the information presented herein supersedes the information contained in the prospectus. This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the prospectus, including any amendments or supplements thereto.

Our common stock is quoted on the Nasdaq Global Select Market under the symbol *COHR*. On October 9, 2006, the last quoted sale price of our common stock was \$35.88 per share.

Investing in the notes or our common stock involves risks. See *Risk Factors* beginning on page 9 of the prospectus dated October 6, 2006.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is October 10, 2006.

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SELLING SECURITYHOLDERS

The notes were originally issued by Coherent and sold by the initial purchasers of the notes in a transaction exempt from the registration requirements of the Securities Act of 1933, as amended (the Securities Act), to persons reasonably believed by the initial purchasers to be qualified institutional buyers in reliance on Rule 144A under the Securities Act. Selling securityholders, including their transferees, pledgees or donees or their successors, may from time to time offer and sell, pursuant to this prospectus supplement and the prospectus, any or all of the notes and shares of common stock into which the notes are convertible.

The following table sets forth information, as of October 9, 2006, with respect to the selling securityholders and the principal amounts of notes and numbers of shares of common stock beneficially owned by each selling securityholder that may be offered pursuant to this prospectus supplement and the prospectus. The information is based on information provided to us by or on behalf of the selling securityholders, and we have not independently verified this information. The selling securityholders may offer all, some or none of the notes or the common stock into which the notes are convertible. Because the selling securityholders may offer all or some portion of the notes or the common stock, we cannot estimate the amount of the notes or the common stock that will be held by the selling securityholders upon termination of any of these sales; the table below assumes that all selling securityholders will sell all of their notes or common stock, unless otherwise indicated. In addition, the selling securityholders identified below may have sold, transferred or otherwise disposed of all or a portion of their notes since the date on which they provided the information regarding their notes in transactions exempt from the registration requirements of the Securities Act.

The percentage of notes outstanding beneficially owned by each selling securityholder is based on \$200,000,000 aggregate principal amount of notes outstanding. The number of shares of common stock that may be sold includes only shares of common stock into which the notes are initially convertible. The conversion rate of the notes and the number of shares of common stock issuable upon conversion of the notes is subject to adjustment under certain circumstances. Accordingly, the number of shares of common stock into which the notes are convertible may change.

Based upon information provided by the selling securityholders, none of the selling securityholders nor any of their affiliates, officers, directors or principal equity holders has held any position or office or has had any material relationship with us within the past three years, with the exception of Merrill Lynch, Pierce, Fenner & Smith Incorporated, which acted as an initial purchaser in the original issuance of the notes on March 13, 2006 and acted as our financial advisor in connection with our proposed acquisition of Excel Technology.

| Name | Principal Amount of Securities Beneficially Owned that May be Sold | Percentage of Notes Outstanding(1) | Number of Shares of Common Stock that May be Sold(2) | Percentage of Common Stock Outstanding(3) |
|-------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------|------------------------------------------------------------------|-------------------------------------------------|
| 1976 Distribution Trust FBO A.R.Lauder/Zinterhofer | \$ 3,000 | * % | 78 | * % |
| 2000 Revocable Trust Lauder/Zinterhofer | \$ 3,000 | * | 78 | * |
| AHFP Context(4) | \$ 450,000 | * | 11,757 | * |
| Alcon Laboratories | \$ 271,000 | * | 7,080 | * |
| Allstate Insurance Company(5) | \$ 2,500,000 | 1.25 | 65,322 | * |
| Aloha Airlines Non-Pilots Pension Trust | \$ 70,000 | * | 1,829 | * |

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|-------------------------------------------------------------------------|---------------|-------|---|---------|------|---|
| Altma Fund Sicav PLC in Respect of the Grafton Sub Fund(4) | \$ 1,538,000 | * | % | 40,186 | * | % |
| American Investors Life Insurance Co.(6) | \$ 1,000,000 | * | | 26,128 | * | |
| Arkansas PERS(7) | \$ 1,220,000 | * | | 31,877 | * | |
| Arlington County Employees Retirement System | \$ 510,000 | * | | 13,325 | * | |
| AstraZeneca Holdings Pension(7) | \$ 155,000 | * | | 4,049 | * | |
| Attorney s Title Insurance Fund(7) | \$ 190,000 | * | | 4,964 | * | |
| Bancroft Fund Ltd.(8) | \$ 1,000,000 | * | | 26,128 | * | |
| BNP Paribas Arbitrage(9) | \$ 3,000,000 | 1.50 | | 78,386 | * | |
| Boilermakers Blacksmith PensionTrust(7) | \$ 2,425,000 | 1.21 | | 63,362 | * | |
| British Virgin Islands Social Security Board | \$ 91,000 | * | | 2,377 | * | |
| Calamos Growth and Income Fund Calamos Advisers Trust(10) | \$ 150,000 | * | | 3,919 | * | |
| Calamos Growth and Income Fund Calamos Investment Trust(10) | \$ 20,000,000 | 10.0 | | 522,576 | 1.64 | |
| Calamos Market Neutral IncomeFund Calamos Investment Trust(10) | \$ 9,500,000 | 4.75 | | 248,223 | * | |
| Capital Works Investment Partners(11) | \$ 500,000 | * | | 13,064 | * | |
| Chrysler Corporation Master Retirement Trust(12) | \$ 4,885,000 | 2.44 | | 127,639 | * | |
| CIBC World Markets Corp.(13) | \$ 2,500,000 | 1.25 | | 65,322 | * | |
| Citadel Equity Fund Ltd.(14) | \$ 24,150,000 | 12.08 | | 631,010 | 1.98 | |
| Citigroup Global Markets Inc.(15) | \$ 12,250,000 | 6.13 | | 320,077 | 1.01 | |
| City and County of San Francisco Retirement System | \$ 783,000 | * | | 20,458 | * | |
| City University of New York(7) | \$ 79,000 | * | | 2,064 | * | |
| CNH CA Master Account, L.P.(16) | \$ 6,500,000 | 3.25 | | 169,837 | * | |
| Context Advantage Master Fund,L.P.(4) | \$ 2,862,000 | 1.43 | | 74,780 | * | |
| Continental Assurance Company on behalf of its Separate Account (E)(17) | \$ 650,000 | * | | 16,983 | * | |
| DBAG London(18) | \$ 6,600,000 | 3.30 | | 172,450 | * | |

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|-------------------------------------------------------------------------------------------|---------------|------|---|---------|------|---|
| Delaware PERS(7) | \$ 950,000 | * | % | 24,822 | * | % |
| Delaware Public Employees Retirement System(12) | \$ 1,985,000 | * | | 51,865 | * | |
| Delta Airlines Master Trust(7) | \$ 500,000 | * | | 13,064 | * | |
| Delta Airlines Master Trust CV(12) | \$ 975,000 | * | | 25,475 | * | |
| Delta Pilots Disability & Survivorship Trust CV(12) | \$ 595,000 | * | | 15,546 | * | |
| Ellsworth Fund Ltd.(8) | \$ 1,000,000 | * | | 26,128 | * | |
| Finch Tactical Plus Class B(4) | \$ 100,000 | * | | 2,612 | * | |
| F.M. Kirby Foundation, Inc.(12) | \$ 880,000 | * | | 22,993 | * | |
| Fore Convertible Master Fund, Ltd.(19) | \$ 8,018,000 | 4.01 | | 209,500 | * | |
| Fore ERISA Fund, Ltd(19) | \$ 738,000 | * | | 19,283 | * | |
| Fore Multi-Strategy Master Fund, Ltd.(19) | \$ 4,070,000 | 2.04 | | 106,344 | * | |
| FPL Group Employees Pension Plan(7) | \$ 475,000 | * | | 12,411 | * | |
| The Grable Foundation | \$ 46,000 | * | | 1,201 | * | |
| Grace Convertible Arbitrage Fund, Ltd.(20) | \$ 4,450,000 | 2.23 | | 116,273 | * | |
| Grady Hospital Foundation | \$ 76,000 | * | | 1,985 | * | |
| Hallmark Convertible Securities Fund(7) | 10,000 | * | | 261 | * | |
| Highbridge International LLC(21) | \$ 15,000,000 | 7.50 | | 391,932 | 1.24 | |
| ICI American Holdings Trust(7) | \$ 275,000 | * | | 7,185 | * | |
| Independence Blue Cross | \$ 416,000 | * | | 10,869 | * | |
| Inflective Convertible Opportunity Fund I, LP(6) | \$ 300,000 | * | | 7,838 | * | |
| Institutional Benchmark Series Ivan Segregated Account(6) | \$ 300,000 | * | | 7,838 | * | |
| Institutional Benchmark Series (Master Feeder) Limited in Respect of Alcor Series(4) | \$ 100,000 | * | | 2,612 | * | |
| International Truck & Engine Corporation Non-Contributory Retirement Plan Trust(12) | \$ 475,000 | * | | 12,411 | * | |
| International Truck & Engine Corporation Retirement Plan for Salaried Employees Trust(12) | \$ 260,000 | * | | 6,793 | * | |

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|-------------------------------------------------------------------------------|---------------|------|---------|-----------|
| International Truck & Engine Corporation Retiree Health Benefits Trust(12) | \$ 285,000 | * % | 7,446 | * % |
| KBC Financial Products USA, Inc.(22) | \$ 2,750,000 | 1.38 | 71,854 | * |
| Lyxor/Context Fund Ltd.(23) | \$ 600,000 | * | 15,677 | * |
| Lyxor/Inflective Convertible Opportunity Fund(6) | \$ 1,000,000 | * | 26,128 | * |
| Man Mac 1, Ltd(24) | \$ 3,400,000 | 1.70 | 88,837 | * |
| Merrill Lynch, Pierce, Fenner & Smith(25) | \$ 4,057,000 | 2.03 | 106,004 | * |
| Microsoft Capital Group, L.P.(12) | \$ 585,000 | * | 15,285 | * |
| Mohican VCA Master Fund, Ltd.(26) | \$ 2,000,000 | 1.00 | 52,257 | * |
| New Orleans Firefighters Pension/Relief Fund | \$ 46,000 | * | 1,201 | * |
| Nuveen Preferred and Convertible Fund JQC(7) | \$ 5,925,000 | 2.96 | 154,813 | * |
| Occidental Petroleum Corporation | \$ 176,000 | * | 4,598 | * |
| OCM Convertible Trust(12) | \$ 1,770,000 | * | 46,247 | * |
| OCM Global Convertible Securities Fund(12) | \$ 525,000 | * | 13,717 | * |
| Partner Reinsurance Company Ltd.(12) | \$ 925,000 | * | 24,169 | * |
| Policemen and Firemen Retirement System of the City of Detroit | \$ 305,000 | * | 7,969 | * |
| Privilege Portfolio Sicav(27) | \$ 3,000,000 | 1.50 | 78,386 | * |
| Pro-Mutual | \$ 499,000 | * | 13,038 | * |
| Prudential Insurance Co. of America(7) | \$ 70,000 | * | 1,829 | * |
| Putnam Convertible Income-Growth Trust(28) | \$ 2,500,000 | 1.25 | 65,322 | * |
| Qwest Occupational Health Trust(12) | \$ 375,000 | * | 9,798 | * |
| Qwest Pension Trust(12) | \$ 1,155,000 | * | 30,178 | * |
| RBC Capital Markets(29) | \$ 4,000,000 | 2.00 | 104,515 | * |
| The St. Paul Travelers Companies, Inc. Commercial Lines(12) | \$ 1,085,000 | * | 28,349 | * |
| Sandelman Partners Multi-Strategy Master fund, Ltd.(30) | \$ 11,250,000 | 5.63 | 293,949 | 1.61 (31) |

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|------------------------------------------------------------|--------------|--------|---------|-----|
| State of Oregon Equity(7) | \$3,485,000 | 1.74 % | 91,058 | * % |
| Steelhead Pathfinder Fund L.P.(32) | \$100,000 | * | 2,612 | * |
| Sterling Invest Co.(7) | \$50,000 | * | 1,306 | * |
| Syngerta AG(7) | \$125,000 | * | 3,266 | * |
| Topaz Fund(33) | \$10,000,000 | 5.00 | 261,288 | * |
| Trustmark Insurance | \$196,000 | * | 5,121 | * |
| UnumProvident Corporation(12) | \$645,000 | * | 16,853 | * |
| Vanguard Convertible Securities Fund, Inc.(12) | \$8,355,000 | 4.18 | 218,306 | * |
| Vicis Capital Master Fund | \$6,000,000 | 3.00 | 156,772 | * |
| Virginia Retirement System(12) | \$3,880,000 | 1.94 | 101,379 | * |
| Wachovia Securities International LTD(34) | \$4,500,000 | 2.25 | 117,579 | * |
| Whitebox Diversified Convertible Arbitrage Partners LP(35) | \$1,000,000 | * | 26,128 | * |
| Worldwide Transactions Limited(4) | \$350,000 | * | 9,145 | * |

* Less than 1%.

(1) Calculated using \$200,000,000 as the total aggregate principal amount of notes outstanding as of August 2, 2006.

(2) Assumes conversion of all of the holder's notes at a conversion price of \$38.27 per share of common stock. However, this conversion rate will be subject to adjustment as described under the section entitled "Description of Notes - Conversion Rights." As a result, the amount of common stock issuable upon conversion of the notes may increase or decrease in the future.

(3) Calculated based on Rule 13d-3(d)(1)(i) of the Exchange Act of 1934, as amended, using 31,252,759 shares of common stock outstanding as of August 2, 2006. In calculating this amount, we treated as outstanding the number of shares of common stock issuable upon conversion of all of that particular holder's notes. However, we did not assume the conversion of any other holder's notes.

(4) Michael S. Rosen and William D. Fertig have voting or investment power over these securities.

(5) Allstate Insurance Company ("AIC"), directly and through its subsidiaries, is one of the largest property and liability insurance companies in the United States. Allstate Live Insurance Company ("ALIC"), an AIC subsidiary, directly and through its subsidiaries, is one of the 20 largest writers of life insurance and annuity products in the United States. Allstate Retirement Plan and Agents Pension Plan are employer sponsored pension plans maintained for Allstate employees and agents. Allstate New Jersey Insurance Company ("ANJIC"), an Illinois insurance company and an indirect subsidiary of AIC, writes property and casualty insurance exclusively in the State of New Jersey. In the course of managing their investment portfolios, AIC and its affiliates may acquire and hold investments that exceed 10% of a class of equity securities of an issuer. The Public Equity Group of Allstate Investments, LLC, which has responsibility for the securities described herein, is not aware of any positions, officers or other material relationships involving AIC or its subsidiaries which should be disclosed. No independent investigation has been made, however, as to whether there are or may have

been any such transactions as a result of insurance activities, business or marketing relationships, or investment activities of other groups or divisions or actions with respect to or by such investee companies. This selling securityholder has advised us that it is an affiliate of registered broker-dealers. The broker-dealers are: Allstate Distributors, LLC, in which ALIC has a 50% equity interest (the remaining 50% is owned by Putnam Investments, Inc.; ALFS, Inc., a wholly-owned subsidiary of ALIC; and Allstate Financial Services, LLC, a wholly-owned subsidiary of ALIC.

(6) Thomas Ray has voting or investment power over these securities. This selling securityholder has advised us that it is an affiliate of a registered broker-dealer. The broker-dealer is Amerivest.

(7) Ann Houlihan has voting or investment power over these securities.

(8) Thomas Dinsmore has voting or investment power over these securities.

(9) This selling securityholder has advised us that it is an affiliate of a registered broker-dealer. The broker-dealer is: BNP Paribas Securities Corp., which is affiliated to BNP Paribas SA.

(10) Pursuant to an Investment Advisory Agreement, Calamos Advisors LLC acts solely as an investment advisor for this asset, and is not the beneficial owner.

(11) John Wylie, Jack Marshall, Mark Correnti and Ken Applegate have voting or investment power over these securities.

(12) Oaktree Capital Management LLC (Oaktree) is the investment manager for this selling securityholder. Oaktree does not hold any equity interest in this selling security holder but has voting and dispositive power over the securities. Lawrence Keele is a principal of Oaktree and is the portfolio management for this selling securityholder. Mr. Keele, Oaktree and all employees and members of Oaktree disclaim beneficial ownership of the securities held by the selling securityholder except for their pecuniary interest therein. This selling securityholder has advised us that it is an affiliate of a registered broker-dealer. The broker-dealer is OCM Investments, LLC. Oaktree Capital Management, LLC is the majority owner of OCM Investments, LLC.

(13) This selling securityholder has advised us that it is a registered broker-dealer.

(14) Citadel Limited Partnership (CLP) is the trading manager of Citadel Equity Fund Ltd. and consequently has investment discretion over the securities held by Citadel Equity Fund Ltd. Citadel Investment Group, L.L.C. (CIG) controls CLP. Kenneth C. Griffin controls CIG and therefore has ultimate investment discretion over securities held by Citdeal Equity Fund Ltd., CLP, CIG and Mr. Griffin each disclaim beneficial ownership of the shares held by Citadel Equity Fund Ltd. This selling securityholder has advised us that it is an affiliate of a registered broker-dealer. The broker-dealers are: Aragon Investments Ltd., Palafax Trading LLC, Citadel Trading Group, LLC and Citadel Derivatives Group, LLC (the Broker-Dealers). The Broker-Dealers are under common control with Citadel Equity Fund Ltd. and one is directly owned by Citadel Equity Fund.

(15) This selling securityholder has advised us that it is a registered broker-dealer.

(16) CNH Partners, LLC is Investment Advisor of the selling securityholder and has sole voting and dispositive power over the registrable securities. Investment principals for the advisor are Robert Krail, Mark Mitchell and Todd Pulvino.

(17) This selling securityholder has advised us that it is an affiliate of CNA Financial Corp., a limited purpose registered broker-dealer.

(18) This selling securityholder has advised us that it is an affiliate of Deutsche Bank Securities, a registered broker-dealer.

(19) Hareesh Paranjape has voting or investment power over these securities. This selling securityholder has advised us that it is a registered broker-dealer.

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(20) Michael Brailov has voting or investment power over these securities.

(21) Highbridge Capital Management, LLC (Highbridge) is the trading manager of Highbridge International LLC (HIC) and consequently has voting control and investment discretion over securities held by HCC. Glen Dubin and Henry Swieca control Highbridge. Each of Highbridge, Glen Dubin and Henry Swieca disclaims beneficial ownership of the securities held by HIC.

(22) This selling securityholder has advised us that it is a registered broker-dealer.

(23) Michael S. Rosen and William D. Fertig have voting or investment power over these securities. This selling securityholder that it is owned by Societe Generale, a registered broker-dealer.

(24) Man-Diversified Fund II Ltd. has been identified as the Controlling Entity of Man Mac 1 Ltd., the beneficial owner of the securities. The manager shares of Man Diversified Fund II Ltd. are owned 75% by Albany Management Company Limited and 25% by Man Holdings Limited. The registered shareholder of Albany Management Company Limited is Argonaut Limited, a Bermuda company which is controlled by Michael Collins, a resident of Bermuda. Man Holdings Limited is a subsidiary of Man Group plc, which is a public company listed on the London Stock Exchange. This selling securityholder has advised us that it is a registered broker-dealer and acquired the registrable securities as compensation for placement agent or investment banking services to the Company.

(25) This selling securityholder has advised us that it is a registered broker-dealer.

(26) Eric Hage and Daniel Hage have voting or investment power over these securities.

(27) David Clott has voting or investment power over these securities.

(28) This selling securityholder has advised us that it is an affiliate of Putnam Retail Management, L.P., a registered broker-dealer.

(29) This selling securityholder has informed us that it is a registered broker-dealer.

(30) Jonathan Sandelman has voting or investment power over these securities.

(31) This calculation includes 214,300 shares of the Company's Common Stock held by the selling securityholder.

(32) J. Michael Johnston and Brian Klein have voting or investment power over these securities.

(33) This selling securityholder has advised us that it is an affiliate of a registered broker-dealer. The broker-dealer is SG Americas Securities.

(34) This selling securityholder has advised us that it is a registered broker-dealer. This selling securityholder has also advised us that it is an affiliate of a registered broker-dealer.

(35) Andrew Redleaf has voting or investment power over these securities.

Information about other selling securityholders will be set forth in prospectus supplements or post-effective amendments, if required. Information about the selling securityholders may change from time to time. Any changed information with respect to which we are given notice will be set forth in prospectus supplements.

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Beneficial ownership is determined under the rules of the SEC, and generally includes voting or investment power with respect to securities.

None of the selling securityholders who are affiliates of broker-dealers purchased the securities outside of the ordinary course of business or, at the time of the purchase of the securities, had any agreements or understandings, directly or indirectly, with any person to distribute the securities.

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\$200,000,000

**2.75% Convertible Subordinated Notes due 2011
and the Common Stock Issuable upon Conversion of the Notes**

We issued the notes in a private placement in March 2006. This prospectus will be used by selling securityholders to resell their notes and the common stock issuable upon conversion of their notes. We will not receive any proceeds from this offering.

The notes mature on March 1, 2011. The notes bear interest at the rate of 2.75% per year semiannually in arrears on March 1 and September 1 of each year, beginning September 1, 2006.

You may convert the notes into shares of our common stock based on a conversion rate of 26.1288 shares of our common stock per \$1,000 principal amount of notes (which is equal to an initial conversion price of approximately \$38.27 per share), subject to adjustment, only under the following circumstances: (1) if the closing price of our common stock reaches, or the trading price of the notes falls below, specified thresholds, (2) if specified distributions to holders of our common stock occur, (3) if a fundamental change occurs or (4) during the period from, and including February 1, 2011 to, but excluding, the maturity date. Upon conversion, in lieu of shares of our common stock, for each \$1,000 principal amount of notes you will receive an amount in cash equal to the lesser of (i) \$1,000 or (ii) the conversion value, determined in the manner set forth in this prospectus, of the number of shares of our common stock equal to the conversion rate. If the conversion value exceeds \$1,000, we will also deliver, at our election, cash or common stock or a combination of cash and common stock with respect to the remaining common stock deliverable upon conversion. If you elect to convert your notes in connection with a fundamental change, we will pay, to the extent described in this prospectus, a make whole premium by increasing the conversion rate applicable to such notes.

If we experience a fundamental change, you may require us to purchase for cash all or a portion of your notes, subject to specified exceptions, at a price equal to 100% of the principal amount of the notes plus accrued and unpaid interest, if any, to the fundamental change purchase date.

Our common stock is quoted on the NASDAQ Global Select Market under the symbol COHR. On October 3, 2006, the last quoted sale price of our common stock was \$34.16 per share.

The notes are our subordinated unsecured obligations and rank junior in right of payment to all of our existing and future senior debt. The notes are effectively subordinated to the indebtedness and other liabilities of our subsidiaries.

Investing in the notes and the common stock into which the notes are convertible involves risks. See Risk Factors beginning on page 9.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is October 6, 2006

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You should rely only on the information contained in or incorporated by reference in this prospectus, a prospectus supplement or an amendment. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information contained in or incorporated by reference in this prospectus, a prospectus supplement or an amendment is accurate as of any date other than the date on the front of those documents.

SUMMARY

This summary represents highlights of information contained elsewhere or incorporated by reference in this prospectus. This summary is not complete and does not contain all of the information that you should consider before investing in the notes or the common stock issuable upon conversion of the notes. You should read the entire prospectus carefully, including Risk Factors and our financial statements and notes to those financial statements, which are incorporated by reference, and other information appearing elsewhere or incorporated by reference in this prospectus. Our fiscal year ends on the Saturday closest to September 30. For convenience, we use September 30 as our fiscal year end dates for our financial statement information throughout this prospectus. References in this prospectus to Coherent, Inc., Coherent, we, us and our refer to Coherent, Inc., a company incorporated in Delaware, and its consolidated subsidiaries, unless the context otherwise requires.

Coherent, Inc.

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 and market lasers, precision optics 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.

During the first quarter of fiscal 2006, we established a new organizational and reporting structure whereby our previously reportable segments, Electro-Optics and Lambda Physik, were fully integrated into one operating segment.

There are many types of lasers and one way of classifying them is by the material used to create the lasing action. We manufacture gas, liquid, semiconductor and solid-state crystal 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. Our broad technical depth enables us to offer a diverse product line characterized by lasers targeted at growth opportunities and key technology applications. In all cases, we aim to be the supplier of first choice by offering a high-value combination of superior technical performance and high reliability.

Photonics is now taking its place alongside electronics as a critical enabling technology for the 21st century. In the field of photonics, the laser is the undisputed workhorse. Consequently, the role of the laser is far-reaching in an ever more diverse set of 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 also new applications where the laser is the enabling tool that makes the work possible.

We design, manufacture and market lasers, precision optics and related accessories for a diverse group of customers. Our products are used in the following market segments:

- **Microelectronics.** Laser-based processes are used at many points within the manufacture and test of the microscopic circuits that make up devices such as cell phones, computers, personal digital assistants, flat-panel televisions and miniaturized audio equipment. Our lasers also enable non-destructive and non-invasive testing during key stages of the circuit manufacturing process. Our microelectronics products support photomask writing, semiconductor inspection and metrology, marking, thin film transistor annealing for flat panel displays, advanced packaging and interconnects, and DUV lithography.

- **Graphic Arts and Display.** Our graphic arts and display products are designed to reduce costs, shorten delivery times and increase end product quality in the commercial printing and graphic arts industries. Applications include computer-to-plate printing, writing data to master disks, photo finishing, film writing and laser projection.
- **Materials Processing.** In the materials processing market segment, we have concentrated our development efforts on compact, low-to-medium power lasers designed for the growing area of non-metal and thin-metal processing, including such applications as cutting and joining plastics using our CO₂ and semiconductor lasers, as well as the cutting, perforating and scoring of packaging materials and the creation of micro-holes in materials used for microelectronics and semiconductor manufacturing.
- **OEM Components and Instrumentation.** Our OEM components and instrumentation market segment includes: medical, in which our optically pumped semiconductor lasers become part of systems designed for flow cytometry and drug discovery; bioinstrumentation, in which our ion lasers and diode modules make cell sorting and DNA and protein sequencing possible; and avionics and defense sectors, in which applications for our lasers range from harsh, flight qualified hardware to thermal imaging.
- **Scientific Research and Government Programs.** Government laboratories, research centers and universities use our lasers to make precision measurements of distance and surface shape, to produce high resolution images of living cells and biological samples, and to study minute details of molecular and atomic reactions. Other applications include multiphoton excitation microscopy, pollution analysis, metrology, spectroscopy, physical chemistry, photochemistry, and laser diagnostics and measurement.

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.
- **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 that 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.
- **Emphasize supply chain management.** We will continue to focus on operational efficiency through an emphasis on supply chain management with the explicit intent of improving gross margins and increasing inventory turns.

- ***Focus on long-term improvement of return on invested capital.*** We will continue to focus on long-term improvement of return on invested capital.

In addition to products we provide, we invest routinely in the core technologies needed to create substantial differentiation for our products in the marketplace. We direct significant engineering efforts to producing 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.

As of July 1, 2006, we had 2,165 full-time employees in 19 sites in 11 countries. Our headquarters are located at 5100 Patrick Henry Drive, Santa Clara, California 95056 and our telephone number is (408) 764-4000.

Recent Developments

During the first quarter of fiscal 2006, we established a new organizational and reporting structure whereby our previously reportable segments, Electro-Optics and Lambda Physik, were fully integrated into one reporting segment. Accordingly, we operate in one segment, the development and marketing of lasers, precision optics and related accessories.

On February 20, 2006 we entered into an Agreement and Plan of Merger (the Merger Agreement) with Excel Technology, Inc. (Excel or Excel Technology). The Merger Agreement provides that, upon the terms and subject to the conditions set forth in the Merger Agreement, Spider Acquisition Corporation, our wholly-owned subsidiary, will merge with and into Excel, with Excel as the surviving corporation of the merger. As a result of the merger, Excel would become our wholly-owned subsidiary and each outstanding share of Excel common stock would be converted into the right to receive \$30 per share in cash, without interest. The estimated cash deliverable to Excel stockholders in the merger is approximately \$362 million. Excel stock options with an exercise price per share of less than \$30 would be purchased for cash by Excel prior to the merger for a purchase price equal to the number of Excel shares subject to the stock option multiplied by the difference between \$30 and the exercise price per share of the stock option, less applicable withholdings. Other unvested Excel stock options with an exercise price per share of \$30 or more would be accelerated prior to the merger and to the extent unexercised, would be terminated immediately prior to the merger. We will not assume any Excel stock options. Consummation of the merger is subject to customary closing conditions, including antitrust approvals. On July 7, 2006, the German Federal Cartel Office, or the FCO, notified us that the FCO has decided to extend its investigation into our acquisition of Excel as it relates to certain low-power range CO2 laser products. As of October 2, 2006 we continue to negotiate with the FCO to allow the merger to be consummated. By statute, the FCO had a deadline of October 9, 2006 to issue its final determination, which may be extended by us and which we have extended to October 19, 2006 to enable continued negotiations. The offering of the notes and the common stock issuable upon conversion of the notes by the selling securityholders is not conditioned on the closing of the merger and we cannot provide any assurances that the conditions to the merger will be satisfied and that the merger will ultimately close.

Excel manufactures and markets photonics-based solutions, consisting of laser systems and electro-optical components primarily for industrial and scientific applications. For the year ended December 31, 2005, Excel had net sales and services revenue of \$137.7 million, income from operations of \$19.5 million and net income of \$15.2 million. As of December 31, 2005, Excel had 721 full-time employees in 19 sites in 9 countries. For the quarter ended June 30, 2006, Excel had net sales and services revenue of \$39.5 million, income from operations of \$6.4 million and net income of \$4.0 million.

The Offering

The following is a brief summary of certain terms of this offering. For a more complete description of the terms of the notes, see Description of the Notes in this prospectus.

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| Notes Offered | \$200.0 million aggregate principal amount of 2.75% Convertible Subordinated Notes due 2011. |
| Maturity Date | March 1, 2011. |
| Interest and Payment Dates | 2.75% per year, payable semiannually in arrears in cash on March 1 and September 1 of each year, beginning September 1, 2006. |
| Conversion Rights | <p>Holders may convert their notes prior to the close of business on the business day before the final maturity date based on the applicable conversion rate only under the following circumstances:</p> <ul style="list-style-type: none">• during any calendar quarter beginning after June 30, 2006 (and only during such calendar quarter), if the closing price of our common stock for at least 20 trading days in the 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is more than 120% of the conversion price per share, which is \$1,000 divided by the then applicable conversion rate;• during any five business day period after any five consecutive trading day period in which the trading price per \$1,000 principal amount of notes for each day of that period was less than 98% of the product of the closing price of our common stock for each day in that period and the conversion rate per \$1,000 principal amount of notes;• if specified distributions to holders of our common stock occur;• if a fundamental change occurs; or• during the one month period from, and including, February 1, 2011 to, but excluding, the maturity date. <p>The initial conversion rate is 26.1288 shares of common stock per \$1,000 principal amount of notes. This is equivalent to an initial conversion price of approximately \$38.27 per share of common stock.</p> <p>Upon conversion of each \$1,000 principal amount of notes, a holder will receive, in lieu of common stock an amount in cash equal to the lesser of (i) \$1,000, or (ii) the conversion value, determined in the manner set forth in this prospectus, of a number of shares equal to the conversion rate. If the conversion value exceeds \$1,000 on the conversion date we will also deliver, at our election, cash or common stock or a combination of cash</p> |

and common stock with respect to the remaining common stock deliverable upon conversion. In no event will the aggregate number of remaining shares of common stock to be issued upon conversion of any note exceed the aggregate share cap of 30 shares per \$1,000 principal amount of notes, subject to adjustment. See Description of the Notes Conversion Rights.

Purchase at Holders Option Upon
Fundamental Change

If a fundamental change occurs, holders will have the right to require us to repurchase for cash all or any portion of their notes. The fundamental change purchase price will be 100% of the principal amount of the notes to be repurchased plus accrued and unpaid interest, if any, to, but excluding, the repurchase date. See Description of the Notes Purchase at Holders Option Upon Fundamental Change.

Make Whole Premium Upon
Fundamental Change

If a fundamental change as described below under Description of the Notes Purchase at Holders Option Upon Fundamental Change occurs we will pay, to the extent described in this prospectus, a make whole premium on notes converted in connection with a fundamental change by increasing the conversion rate applicable to the notes. The amount of the increase in the applicable conversion rate, if any, will be based on our common stock price and the effective date of the fundamental change. A description of how the increase in the applicable conversion rate will be determined and a table showing the increase that would apply at various common stock prices and fundamental change effective dates are set forth under Description of the Notes Make Whole Premium Upon Fundamental Change.

Ranking

The notes are our direct unsecured, subordinated obligations and will rank junior in right of payment to all of our existing and future senior indebtedness. The notes are and will be effectively junior to our subsidiaries existing and future indebtedness and other liabilities including trade payables.

As of July 1, 2006, on a pro forma basis after giving effect to the acquisition of Excel Technology, we would have had \$201.2 million of indebtedness outstanding, including \$1.2 million of senior indebtedness, and our subsidiaries would have had total liabilities, including trade payables, but excluding inter-company liabilities of approximately \$137.0 million.

The terms of the indenture under which the notes have been issued do not limit our ability or our subsidiaries to incur additional debt, including senior debt.

Use of Proceeds

We will not receive any proceeds from this offering.

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Form and Denomination

The notes are issued in minimum denominations of \$1,000 and any integral multiple of \$1,000.

Trading

The notes will not be listed on any securities exchange or included in any automated quotation system. However, the notes are eligible for The Portal Market.

Nasdaq Symbol for Common Stock

Our common stock is quoted on the NASDAQ Global Select Market under the symbol **COHR**.

Risk Factors

See **Risk Factors** and other information included or incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to invest in the notes.

ABOUT THIS PROSPECTUS

This prospectus is part of a *shelf* registration statement that we have filed with the Securities and Exchange Commission, or the SEC. By using a shelf registration statement, the selling securityholders may sell, from time to time, the 2.75% Convertible Subordinated Notes due 2011 that we issued on March 13, 2006, which we refer to as the notes, as well as the shares of common stock issuable upon conversion of the notes.

For further information about our business and the securities offered by this prospectus, you should refer to the registration statement and its exhibits. The exhibits to our registration statement contain the full text of certain contracts and other important documents we have summarized in this prospectus. Since these summaries may not contain all the information that you may find important in deciding whether to purchase the securities we offer, you should review the full text of these documents. The registration statement can be obtained from the SEC as indicated under the heading *Where You Can Find More Information*.

This prospectus provides you with a general description of the securities the selling security holders may offer. Each time we or any selling security holders sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and any applicable prospectus supplement, you should rely on the information in the applicable prospectus supplement. You should read both this prospectus and any applicable prospectus supplement, together with additional information described under the heading *Where You Can Find More Information*.

You should rely only on the information incorporated by reference or provided in this prospectus and any prospectus supplement. We have authorized no one to provide you with different information. This prospectus may only be used where it is legal to sell these securities. You should assume that the information in this prospectus is accurate as of the date of the prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

We were originally incorporated in California on May 26, 1966 and reincorporated in Delaware on October 1, 1990. Our headquarters are located at 5100 Patrick Henry Drive, Santa Clara, California 95056 and our telephone number is (408) 764-4000.

References in this prospectus to *Coherent*, *we*, *us* and *our* refer to Coherent, Inc. and its subsidiaries, unless the context otherwise requires.

RISK FACTORS

Our business faces significant risks. The risks described below may not be the only risks we face. Additional risks that we do not yet know of or that we currently think are immaterial may also impair our business operations. If any of the events or circumstances described in the following risks actually occur, our business, financial condition or results of operations could suffer, and the trading price of our common stock could decline.

Risks Related to the Business

We may experience quarterly and annual fluctuations in our net sales and operating results in the future, which may result in volatility in our stock price.

Our net sales and operating results may vary significantly from quarter to quarter and from year to year in the future. A number of factors, many of which are outside of our control, may cause these variations, including:

- general economic uncertainties;
- fluctuations in demand for, and sales of, our products or prolonged downturns in the industries that we serve;
- ability of our suppliers 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, including increases in oil prices;
- 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;
- rate of market acceptance of our new products;
- 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;
- level of capital spending of our customers;
- potential obsolescence of our inventory; and
- costs related to acquisitions of technology or businesses.

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

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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 common 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. These factors, as well as general economic and political conditions or investors' concerns regarding the credibility of corporate financial statements and the accounting profession, may have a material adverse affect on the market price of our stock in the future.

We are exposed to risks associated with worldwide economic slowdowns and related uncertainties.

Concerns about consumer and investor confidence, volatile corporate profits and reduced capital spending, international conflicts, terrorist and military activity, civil unrest and pandemic illness could cause a slowdown in customer orders or cause customer order cancellations. 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 political, social and economic conditions make it difficult for our customers, our suppliers and us to accurately forecast and plan future business activities. In particular, it is difficult to develop and implement strategy, sustainable business models and efficient operations, as well as effectively manage supply chain relationships. If such conditions persist, our business, financial condition and results of operations could suffer.

We depend on sole source or limited source suppliers for some of the 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. Some of these suppliers are relatively small private companies that may discontinue their operations at any time. We typically purchase our components and materials through purchase orders and we have no guaranteed supply arrangement with any 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. 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, would impair our ability to meet scheduled product deliveries to our customers and could cause customers to cancel orders.

We rely exclusively on our own production capability to manufacture certain strategic components, optics and optical systems, 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 of our products and, if we are unable to realize greater sales volumes and lower costs, our operating results may suffer.

Our future success depends on the continued growth of the markets for lasers, laser systems, precision optics 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 industry's high quality, high priced supplier of laser systems. We have, in the past, experienced decreases in the average selling prices of some of our products. We anticipate that as competing products become more widely available, the average selling price of our products may decrease. If we are unable to offset the anticipated decrease in our average selling prices 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 our products. Furthermore, as average selling prices 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 average selling prices 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 average selling prices (ASPs), and therefore, we have to sell more units to maintain revenue levels.

Over the last three fiscal years, our research and development expenses have been in the range of 11% to 13% 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 sales that could harm our financial condition and results of operations.

For the three and nine months ended July 1, 2006, 67% and 67%, respectively, of net sales were derived from customers outside of the United States. For fiscal years 2005, 2004 and 2003, 65%, 61% and 61%, respectively, 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 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; and
- preference for locally produced products.

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.

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.

We could become subject to litigation regarding intellectual property rights, which could seriously harm our business.

In recent years, there has been significant litigation in the United States involving patents and other intellectual property rights. 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. 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, our business may be seriously harmed. We do not have insurance to cover potential claims of this type.

We may, in the future, initiate claims or litigation against third parties for infringement of our proprietary rights to protect these 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.

We are exposed to lawsuits in the normal course of our business, including for product liability claims if personal injury or death occurs from the use of our products. While we typically maintain customary levels of business insurance, litigation can be expensive, lengthy, and disruptive to normal business operations. 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.

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.

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 companies, including Newport Corporation; Excel Technology, Inc.; JDS Uniphase Corp.; Rofin-Sinar Technologies, Inc.; and Cymer, Inc., 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 that have more cash reserves 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. As a result of the foregoing factors, we expect that competitive pressures may result in price reductions, reduced margins and loss of market share.

For example, 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 technical 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 such 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 recognize additional cost of sales may be required in future periods.

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.

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 six 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 may adversely impact our financial results and operations.

Our manufacturing strategy includes relying heavily on sourcing from contract manufacturers, including some performed at international sites located in Asia. Our ability to resume internal manufacturing operations for certain products in a timely manner has been 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. The inability of any contract manufacturer to meet our cost, quality, performance and availability standards could adversely impact our financial condition or results of operations. 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 manage our growth 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. We continue to expand the scope of our operations domestically and internationally. 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.

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 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;
- incur debt;
- assume liabilities; or
- incur expenses related to in-process research and development, impairment of goodwill and amortization.

These purchases also involve numerous risks, including:

- problems combining the acquired operations, technologies or products;
- unanticipated costs or liabilities;
- 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; and
- the failure to complete these acquisitions after signing definitive agreements.

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, 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, site and were to spread to a reactor used to grow semiconductor wafers, it could release highly toxic emissions. We believe that our safety procedures for handling and disposing of such materials comply with all federal, state and offshore regulations and standards. However, the risk of accidental environmental contamination or injury from such materials cannot be entirely eliminated. In the event of such an accident involving such materials, we could be liable for damages and such liability could exceed the amount of our liability insurance coverage and the resources of our business.

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.

For example, in 2003 the European Union enacted 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), for implementation in each country that is a member of the European Union. RoHS and WEEE regulate the use of certain hazardous substances in, and require the collection, reuse and recycling of waste from, certain products we manufacture. We are aware of similar legislation that is currently in force or is being considered in the United States, as well as other countries, such as Japan and China. RoHS and WEEE are in the process of being implemented by individual countries in the European Union. It is likely that each jurisdiction will interpret RoHS and WEEE differently as they each implement them. We will continue to monitor RoHS and WEEE guidance as it is announced by individual jurisdictions to determine our responsibilities. The incomplete guidance available

to us to date suggests that in some instances we will not be directly responsible for compliance with RoHS and WEEE because some of our products may be subject to exemptions. However, because some products may not be exempt and because the products are sold under our brand name, we may at times become contractually or directly subject to such regulations. Also, final guidance from individual jurisdictions may impose different or additional responsibilities upon us. Our failure to comply with any of such 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 countries in the European Union.

Private companies outside of Europe, most notably in Japan, are undertaking similar green initiatives. Noncompliance would result in similar risks.

If our facilities were to experience catastrophic loss, our operations would be seriously harmed.

Our facilities could be subject to a catastrophic loss from fire, flood, earthquake 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, Delaware law, our Common Shares Rights Plan, our Change-of-Control Severance Plan and our convertible notes 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;
- limiting the ability of our stockholders to act by written consent; 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.

Our common shares rights agreement permits the holders of rights to purchase shares of our common stock to exercise the stock purchase rights following an acquisition of or merger by us with another corporation or entity, following a sale of 50% or more of our consolidated assets or earning power, or the acquisition by an individual or entity of 20% or more of our common stock. Our successor or acquirer is required to assume all of our obligations and duties under the common shares rights agreement, including in certain circumstances the issuance of shares of its capital stock upon exercise of the stock purchase rights. The existence of our common shares rights agreement may have the effect of delaying, deferring or preventing a change of control and, as a consequence, may discourage potential acquirers from making tender offers for our shares.

Certain provisions of our convertible notes could make it more difficult or more expensive for a third party to acquire us. Upon the occurrence of certain transactions constituting a fundamental change, holders of the notes will have the right, at their option, to require us to repurchase all of their notes or any portion of the principal amount of such notes in integral multiples of \$1,000. We may also be required to issue additional shares upon conversion or provide for conversion into the acquirer's capital stock in the event of certain fundamental changes.

Changes in tax rates or tax liabilities could affect future results.

As a global company, we are subject to taxation in the United States and various other countries. 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 with differing tax rates, changes in the valuation of our deferred tax assets and liabilities, or changes in the tax laws. For example, recent U.S. legislation governing taxation of extraterritorial income (ETI) repealed certain export subsidies that were prohibited by the World Trade Organization and enacted different tax provisions. These new tax provisions are not expected to fully offset the loss of the repealed tax provisions and, as a result, our U.S. tax liability may increase. In addition, we are subject to regular examination of our income tax returns by the Internal Revenue Service and other tax authorities. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be materially different than the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our results of operations.

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

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.

Risks Related to the Pending Acquisition of Excel Technology, Inc.

If the Excel Technology acquisition is not consummated, we will have broad discretion on the use of proceeds from the offering of the notes.

We intend to use the net proceeds from the issuance of the notes in March 2006 to fund a portion of the cash purchase price of the Excel Technology acquisition. However, the Excel Technology acquisition is subject to the satisfaction or waiver of certain conditions, some of which are beyond our control, such as clearance by the FCO (see Summary Recent Developments), and this offering by the selling securityholders is not conditioned on the consummation of the Excel Technology acquisition. There can be no assurances that the Excel Technology acquisition will occur on the terms set forth in the Merger Agreement or at all. If the Excel Technology acquisition is not consummated, we intend to use the proceeds from the issuance of the notes for working capital and other general corporate purposes, including possible future acquisitions.

If the acquisition is consummated, we may not be able to successfully integrate Excel Technology's business with our business.

The realization of the benefits of the Excel Technology acquisition will depend in part on the successful integration of technology, operations and personnel. The integration process will be complex, time consuming and expensive and may disrupt our business if not completed in a timely and efficient manner. We cannot assure you that Excel Technology's business can be successfully integrated in a timely manner or at all or that any of the anticipated benefits from the acquisition will be realized. Risks to the successful integration of Excel Technology with our company include, among others:

- the impairment of relationships with employees, customers and suppliers as a result of integration of management and other key personnel;
- the potential disruption of our business and the distraction of our management;
- the difficulty of incorporating the acquired technology and rights into the product offerings of our company; and
- unanticipated expenses related to the integration of Excel Technology.

We may not succeed in addressing these risks or any other problems encountered in connection with the acquisition. Our inability to timely and efficiently achieve integration could result in a material adverse effect on our business, financial condition and results of operations.

Charges to earnings resulting from the application of the purchase method of accounting to the Excel Technology acquisition may adversely affect the market value of our common stock.

In accordance with generally accepted accounting principles, we will account for the Excel Technology acquisition using the purchase method of accounting, which will result in charges to earnings that could have a material adverse effect on the market value of our common stock following completion of the acquisition. Under the purchase method of accounting, we will allocate the total purchase price to Excel Technology's net tangible and identifiable intangible assets based upon their estimated fair values at the acquisition date. The excess of the purchase price over net tangible and identifiable intangible assets will be recorded as goodwill. We will expense the portion of the estimated purchase price allocated to in-process research and development in the quarter in which the merger is completed. We will incur additional depreciation and amortization expense over the useful lives of certain of the net tangible and intangible assets acquired in connection with the acquisition. In addition, to the extent the value of goodwill or intangible assets with indefinite lives becomes impaired, we may be required to incur material charges relating to the impairment of those assets. These depreciation, amortization, in-process research

and development and potential impairment charges could have a material impact on our results of operations.

The market price of our common stock may decline as a result of the acquisition of Excel Technology and the conversion of the notes.

The market price of our common stock may decline as a result of the acquisition of Excel Technology if, among other things, the integration of the our business and Excel Technology's business is unsuccessful, if the operational cost savings estimates are not realized, or if the transaction costs related to the acquisition of Excel Technology are greater than expected or if the notes are ultimately converted into shares of our common stock, thus increasing the number of shares outstanding. The market price also may decline if we do not achieve the perceived benefits of the acquisition of Excel Technology as rapidly or to the extent anticipated by financial or industry analysts or if the effect of the acquisition of Excel Technology on our financial results is not consistent with the expectations of financial or industry analysts.

In the event that the acquisition of Excel is not consummated, we will have to incur a charge relating to acquisition and integration costs.

In accordance with generally accepted accounting principles, we will have to incur a charge of approximately \$5 million to our earnings for the fiscal period in which we determine that the acquisition of Excel Technology is not likely to be consummated.

Risks related to our industry

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 market is subject to rapid change, it is difficult to predict its potential size or future growth rate. Our success in generating revenues in this market 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, laser systems and precision optics; and
- our ability to accurately predict and develop our products to meet industry standards.

For the three and nine months ended July 1, 2006, our research and development costs were \$18.7 million (13% of net sales) and \$52.6 million (12% of net sales), respectively. For our fiscal years 2005, 2004 and 2003, our research and development costs were \$57.5 million (11% of net sales), \$62.7 million (13% of net sales) and \$51.0 million (13% 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. 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 will 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.

Risks Related to the Notes

The notes rank junior in right of payment to our senior debt and effectively junior to the liabilities of our subsidiaries.

The notes are subordinated to all of our existing and future senior debt. The notes are not secured by any of our assets. In the event we default on any of our senior debt or in the event we undergo a bankruptcy, liquidation, dissolution, reorganization, or similar proceeding, the proceeds of the sale of our assets would first be applied to the repayment of our senior debt before any of those proceeds would be available to make payments on our subordinated debt, including the notes. Accordingly, upon an acceleration of the notes, there may be no assets remaining from which claims of the holders of the notes could be satisfied or, if any assets remained, they might be insufficient to satisfy those claims in full. No payment in respect of the notes will be permitted during certain periods when an event of default under our senior debt permits the senior debt lenders to accelerate its maturity.

In addition, the notes are not guaranteed by any of our existing or future subsidiaries. Our subsidiaries are separate and distinct legal entities and have no obligation, contingent or otherwise, to pay any amounts due with respect to the notes or to make any funds available therefor, whether by dividends, loans or other payments. As a result, the notes will effectively rank junior in right of payment to all existing and future debt and other liabilities (including trade payables) of our subsidiaries.

As of July 1, 2006, on a pro forma basis after giving effect to the acquisition of Excel Technology, we would have had \$201.2 million of indebtedness outstanding, including \$1.2 million of senior indebtedness, and our subsidiaries would have had total liabilities, including trade payables, but excluding intercompany liabilities, of approximately \$137.0 million. The pro forma total liabilities are based on preliminary estimates, evaluations and other data currently available and will be revised as we complete the valuation studies necessary to determine the fair values of liabilities we expect to assume and the related allocations of purchase price. Accordingly, the pro forma liabilities will change as a result of the final purchase price allocation and the differences may be material.

In addition, the indenture governing the notes does not restrict us or our subsidiaries from incurring debt (including senior debt) in the future. The incurrence by us of additional senior debt or by our subsidiaries of additional debt and other liabilities will increase the risks described above.

We may depend on the cash flows of our subsidiaries in order to satisfy our obligations under the notes.

We are an operating entity that also conducts a significant portion of our business through our subsidiaries. Our operating cash flows and consequently our ability to service our debt, including the notes,

is therefore partially dependent upon our subsidiaries' earnings and their distributions of those earnings to us and may also be dependent upon loans, advances or other payments of funds to us by those subsidiaries. Our subsidiaries are separate legal entities and have no obligation, contingent or otherwise, to pay any amount due pursuant to the notes or to make any funds available for that purpose. Our subsidiaries' ability to make payments may be subject to the availability of sufficient surplus funds, the terms of such subsidiaries' indebtedness, applicable laws and other factors.

There are no restrictive covenants in the indenture for the notes relating to our ability to incur future indebtedness or complete other transactions.

The indenture governing the notes does not contain any financial or operating covenants or restrictions on the payment of dividends, the incurrence of indebtedness, transactions with affiliates, incurrence of liens or the issuance or repurchase of securities by us or any of our subsidiaries. We therefore may incur additional debt, including secured indebtedness that would be effectively senior to the notes to the extent of the value of the assets securing such debt, or indebtedness at the subsidiary level to which the notes would be structurally subordinated. We cannot assure you that we will be able to generate sufficient cash flow to pay the interest on our debt, including the notes offered hereby, or that future working capital, borrowings or equity financing will be available to pay or refinance any such debt.

Fluctuations in the price of our common stock may prevent you from being able to convert the notes and may impact the price of the notes and make them more difficult to resell.

The ability of holders of the notes to convert the notes is conditioned on the closing price of our common stock reaching specified thresholds or the occurrence of specified events, such as a fundamental change. If the closing price threshold for conversion of the notes as described under Description of the Notes Conversion Rights Conversion Based on Common Stock Price is satisfied during a calendar quarter, holders may convert the notes only during the subsequent calendar quarter. If such closing price thresholds are not satisfied and the other specified events that would permit a holder to convert notes do not occur, holders would only be able to convert their notes during the one month period from and including February 1, 2011 to, but excluding, the final maturity date on March 1, 2011.

Because the notes are convertible into shares of our common stock, volatility or depressed prices for our common stock could have a similar effect on the trading price of the notes and could limit the amount of cash payable upon conversion of the notes. Holders who receive common stock upon conversion of the notes will also be subject to the risk of volatility and depressed prices of our common stock.

The make whole premium that may be payable upon conversion in connection with a fundamental change may not adequately compensate you for the lost option time value of your notes as a result of such fundamental change.

If you convert notes in connection with a fundamental change, we may be required to pay a make whole premium by increasing the conversion rate applicable to your notes, as described under Description of the Notes Make Whole Premium Upon Fundamental Change. While these increases in the applicable conversion rate are designed to compensate you for the lost option time value of your notes as a result of a fundamental change, such increases are only an approximation of such lost value and may not adequately compensate you for such loss. In addition, even if a fundamental change occurs, in some cases described below under Description of the Notes Make Whole Premium Upon Fundamental Change there will be no such make whole premium.

Because your right to require repurchase of the notes is limited, the market price of the notes may decline if we enter into a transaction that is not a fundamental change under the indenture.

The term *fundamental change* is limited and may not include every event that might cause the market price of the notes to decline or result in a downgrade of the credit rating of the notes. The term *fundamental change* does not apply to transactions in which 100% of the consideration paid for our common stock in a merger or similar transaction is publicly traded common stock. Our obligation to repurchase the notes upon a fundamental change may not preserve the value of the notes in the event of a highly leveraged transaction, reorganization, merger or similar transaction. See *Description of Notes Purchase at Holders Option Upon Fundamental Change*.

If you hold notes, you are not entitled to any rights with respect to our common stock, but you are subject to all changes made with respect to our common stock.

If you hold notes, you are not entitled to any rights with respect to our common stock (including, without limitation, voting rights and rights to receive any dividends or other distributions on our common stock), but you are subject to all changes affecting the common stock. You will only be entitled to rights on the common stock if and when we deliver shares of common stock to you in exchange for your notes and in limited cases under the anti-dilution adjustments of the notes. For example, in the event that an amendment is proposed to our certificate of incorporation or by-laws requiring stockholder approval and the record date for determining the stockholders of record entitled to vote on the amendment occurs prior to delivery of the common stock, you will not be entitled to vote on the amendment, although you will nevertheless be subject to any changes in the powers, preferences or special rights of our common stock.

We may not have the ability to purchase notes when required under the terms of the notes.

Holders of notes may require us to purchase for cash all or a portion of their notes upon the occurrence of certain specific kinds of fundamental change events. We cannot assure you that we will have sufficient financial resources or be able to arrange financing to pay the repurchase price of the notes on any date that we would be required to do so under the terms of the notes.

Future credit agreements or other agreements relating to our indebtedness might contain provisions prohibiting the redemption or repurchase of the notes or provide that a change in control constitutes an event of default. If a fundamental change or specified trigger event occurs at a time when we are prohibited from purchasing or redeeming the notes, we could seek the consent of our lenders to purchase or redeem the notes or could attempt to refinance this debt. If we do not obtain consent, we could not purchase or redeem the notes. Our failure to purchase tendered notes or to redeem the notes would constitute an event of default under the indenture, which might constitute a default under the terms of our other debt. In such circumstances, or if a fundamental change would constitute an event of default under our senior indebtedness, the subordination provisions of the indenture would possibly limit or prohibit payments to you. The term *fundamental change* is limited to certain specified transactions and may not include other events that might harm our financial condition. In addition, the term *fundamental change* does not apply to transactions in which 100% of the consideration paid for our common stock in a merger or similar transaction is publicly traded common stock. Our obligation to offer to purchase the notes upon a fundamental change would not necessarily afford you protection in the event of a highly leveraged transaction, reorganization, merger or similar transaction involving us.

You should consider the United States federal income tax consequences of owning the notes.

The United States federal income tax treatment of the conversion of the notes into a combination of our common stock and cash is uncertain. You are urged to consult your tax advisors with respect to the United States federal income tax consequences resulting from the conversion of notes into a combination

of cash and common stock. A discussion of the United States federal income tax consequences of ownership of the notes is contained in this prospectus under the heading "Certain U.S. Federal Income Tax Considerations."

If we pay a cash dividend on our common stock, you may be deemed to have received a taxable dividend without the receipt of any cash.

If we pay a cash dividend on our common stock, an adjustment to the conversion rate may result, and you may be deemed to have received a taxable dividend subject to U.S. federal income tax without the receipt of any cash. If you are a Non-U.S. Holder (as defined in "Certain U.S. Federal Income Tax Considerations"), such deemed dividend generally will be subject to U.S. federal withholding tax at a 30% rate or such lower rate as may be specified by an applicable treaty. See "Certain U.S. Federal Income Tax Considerations."

An active trading market for the notes may not develop.

The notes are a new issue of securities for which there is currently no public market, and no active trading market might ever develop. If the notes are traded after their initial issuance, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, the price, and volatility in the price, of our shares of common stock, our performance and other factors. In addition, we do not know whether an active trading market will develop for the notes. To the extent that an active trading market does not develop, the liquidity and trading prices for the notes may be harmed.

We have no plans to list the notes on a securities exchange. The notes are eligible for trading on the NASDAQ's screen-based automated trading system known as PORTAL, "Private Offerings, Resale and Trading through Automated Linkages." Any market-making activity, if initiated, may be discontinued at any time, for any reason or for no reason, without notice. We cannot assure you any firm or person will make a market in the notes.

The liquidity of any market for the notes will depend upon the number of holders of the notes, our results of operations and financial condition, the market for similar securities, the interest of securities dealers in making a market in the notes and other factors. An active or liquid trading market for the notes may not develop.

The conditional conversion feature of the notes could result in your receiving less than the value of the common stock into which a note is convertible.

The notes are convertible into shares of our common stock only if specified conditions are met. If the specific conditions for conversion are not met, you will not be able to convert your notes until the one month period from, and including, February 1, 2011 to, but excluding, the final maturity date of the notes on March 1, 2011, and until such time, you may not be able to receive the value of the common stock into which the notes would otherwise be convertible.

Provisions of the notes, our corporate documents and Delaware law could discourage an acquisition of us by a third party.

Certain provisions of the notes could make it more difficult or more expensive for a third party to acquire us. Upon the occurrence of certain transactions constituting a fundamental change, holders of the notes will have the right, at their option, to require us to repurchase all of their notes or any portion of the principal amount of such notes in integral multiples of \$1,000. We may also be required to issue additional shares upon conversion or provide for conversion into the acquirer's capital stock in the event of certain fundamental changes.

In addition, our certificate of incorporation, bylaws and common shares rights plan, as well as Delaware law, contain provisions that may discourage or delay the acquisition of us by a third party. See **Risks Related to the Business** Provisions of our charter documents, Delaware law, our Common Shares Rights Plan and our Change-of-Control Severance Plan may have anti-takeover effects that could prevent or delay a change in control above.

The price of our common stock may be volatile.

In the past, the price of our common stock has experienced volatility due to a number of factors, some of which are beyond our control. The price of our common stock may continue to experience volatility in the future from time to time. Among the factors that could affect our stock price are:

- our operating and financial performance and prospects;
- quarterly variations in key financial performance measurer, such as earnings per share, net income and revenue;
- changes in revenue or earnings estimates or publication of research reports by financial analysts;
- announcements of technological innovations or new products by us or our competitors;
- speculation in the press or investment community;
- strategic actions by us or our competitors, such as acquisitions or restructurings;
- sales of our common stock or other actions by investors with significant shareholdings;
- general market conditions for security and other technology companies;
- domestic and international economic, legal, political and regulatory factors unrelated to our performance; and
- the conversion of the notes.

The stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock. Any adverse effect upon the trading price of our common stock would, in turn, adversely affect the trading price of the notes.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein by reference contain statements that we believe are forward-looking statements under the meaning of the Private Securities Litigation Reform Act of 1995 and are intended to enjoy protection of the safe harbor for forward-looking statements provided by that Act. These forward-looking statements generally can be identified by use of phrases such as believe, plan, expect, anticipate, intend, forecast or other similar words or phrases. Forward looking statements include statements regarding:

- changes in economic conditions generally and in the markets we serve;
- net sales;
- results of operations;
- gross profits;
- research and development projects and expenses;
- selling, general and administrative expenses;
- warranty reserves;
- legal proceedings;
- claims against third parties for infringement of our proprietary rights;
- liquidity and sufficiency of existing cash, cash equivalents and short-term investments for near-term requirements;
- development and acquisition of new technology and intellectual property;
- write-downs for excess or obsolete inventory;
- competitors and competitive pressures;
- growth of applications for our products and increase of market share;
- our ability to obtain components and materials in a timely manner;
- our ability to identify alternative sources of supply for components;
- our ability to achieve adequate manufacturing yields;
- the impact of recent acquisitions;
- our ability to leverage power and energy management products into our next generation products;
- compliance with environmental regulations;
- participation in the bio-agent detection market;
- leveraging of our technology portfolio and application engineering;

- optimizing our leadership position in existing markets;
- collaborative customer and industry relationships;
- enhancing our market position through our existing technology, as well as developing new technologies;
- our emphasis on supply chain management;

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- our use of financial market instruments;
- simplifications of our foreign legal structure and reduction of our presences in certain countries; and
- focus on long-term improvement of return on invested capital.

These forward-looking statements are based on our current plans and expectations and involve a number of risks and uncertainties that could cause actual results and events to vary materially from the results and events anticipated or implied by such forward-looking statements. For example, as discussed elsewhere herein, many of our products may not be exempt from and will become subject to European WEEE-ROHS regulations, and we have launched a program to bring our products into compliance with these regulations. For a discussion of these and other risks and uncertainties, please refer to Risk Factors. The list of factors that could affect future performance and the accuracy of forward-looking statements is illustrative but by no means exhaustive. Accordingly, all forward-looking statements should be evaluated with the understanding of their inherent uncertainty. The forward-looking statements included in this prospectus are based on, and include, our estimates as of the date hereof. We anticipate that subsequent events and market developments will cause our estimates to change. However, while we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so, even if new information becomes available in the future.

USE OF PROCEEDS

All sales of the notes or shares of common stock issuable upon conversion of the notes will be by or for the account of the selling securityholders listed in any prospectus supplement. We will not receive any proceeds from the sale by any selling securityholder of the notes or the common stock issuable upon conversion of the notes.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges on a historical basis for the periods indicated. The ratios are calculated by dividing earnings by fixed charges.

| | Fiscal Year Ended September 30, | | | | | Nine months ended July 1, 2006 |
|---------------------------------------|---------------------------------|------|------|------|-------|--------------------------------|
| | 2001 | 2002 | 2003 | 2004 | 2005 | |
| Ratio of earnings to fixed charges(1) | 6.9x | | | 7.4x | 12.3x | 10.3x |

(1) For purposes of calculating the ratio of earnings to fixed charges, earnings represents income (loss) from continuing operations before income taxes and minority interest, plus fixed charges. Fixed charges means the sum of (i) interest expensed and capitalized, (ii) amortization premiums, discounts and capitalized expenses related to indebtedness and (iii) an estimate of the interest within rental expense. Earnings, as defined, were insufficient to cover fixed charges by \$97.5 million and \$49.5 million in the years ended September 30, 2002 and 2003, respectively.

PRICE RANGE OF COMMON STOCK

Our common stock trades on the NASDAQ Global Select Market under the symbol COHR. The following table sets forth, for the periods indicated, the high and low closing sale prices for our common stock as reported by the NASDAQ Global Select Market:

| | High | Low |
|-----------------------------------------|----------|----------|
| Fiscal 2005 | | |
| First Quarter | \$ 32.27 | \$ 22.86 |
| Second Quarter | 34.00 | 28.41 |
| Third Quarter | 37.75 | 30.68 |
| Fourth Quarter | 38.68 | 29.13 |
| Fiscal 2006 | | |
| First Quarter | \$ 32.85 | \$ 27.51 |
| Second Quarter | 35.11 | 29.44 |
| Third Quarter | 37.91 | 30.98 |
| Fourth Quarter | 37.21 | 29.86 |
| Fiscal 2007 | | |
| First Quarter (through October 3, 2006) | \$ 34.72 | \$ 34.16 |

DESCRIPTION OF THE NOTES

We issued the notes under the indenture, dated as of March 13, 2006, between Coherent, Inc., as issuer, and U.S. Bank National Association, as trustee. As used in this description of notes, the words our company, we, us, our or Coherent refer only to Coherent, Inc. and do not include of our current or future subsidiaries. We have summarized the material provisions of the notes below. The following description is not complete and is subject to, and qualified by reference to, all of the provisions of the indenture and the notes, which we urge you to read because they define your rights as a note holder. A copy of the indenture, including a form of the notes, is available upon request to us.

General

The notes are limited to \$200,000,000 aggregate principal amount. The notes will mature on March 1, 2011 unless earlier redeemed, converted or repurchased. The notes were issued in denominations of \$1,000 or in integral multiples of \$1,000. The notes will be payable at the principal corporate trust office of the paying agent, which initially will be an office or agency of the trustee, or an office or agency maintained by us for such purpose, in the Borough of Manhattan, The City of New York.

The notes bear cash interest at the rate of 2.75% per year on the principal amount from the issue date, or from the most recent date to which interest has been paid or provided for. Interest will be payable semiannually in arrears on March 1 and September 1 of each year, beginning on September 1, 2006, to holders of record at the close of business on the February 15 or the August 15 immediately preceding such interest payment date. Each payment of cash interest on the notes will include interest accrued for the period commencing on and including the immediately preceding interest payment date (or, if none, the original issue date of the notes) through the day before the applicable interest payment date (or purchase or redemption date, as the case may be). Any payment required to be made on any day that is not a business day will be made on the next succeeding business day. Interest will be calculated using a 360-day year composed of twelve 30-day months. A business day is any weekday that is not a day on which banking institutions in The City of New York are authorized or obligated to close.

Interest will cease to accrue on a note upon its maturity, conversion or purchase by us at the option of a holder. We may not reissue a note that has matured or been converted, been purchased by us at your option, redeemed or otherwise cancelled, except for registration of transfer, exchange or replacement of such note.

Notes may be presented for conversion at the office of the conversion agent and for exchange or registration of transfer at the office of the registrar. The conversion agent and the registrar shall initially be the trustee. No service charge will be made for any registration of transfer or exchange of notes. However, we may require the holder to pay any tax, assessment or other governmental charge payable as a result of any transfer or exchange to a person other than the holder.

Subordination of the Notes

The payment of the principal of, premium, if any, and interest on the notes is subordinated to the prior payment in full, in cash or other payment satisfactory to the holders of senior indebtedness, of all existing and future senior indebtedness.

If we dissolve, wind-up, liquidate or reorganize, or if we are the subject of any bankruptcy, insolvency, receivership or similar proceedings, we must pay the holders of senior indebtedness in full before we pay the holders of the notes. If the notes are accelerated because of an event of default under the indenture, we must pay the holders of senior indebtedness in full, in cash or other payment satisfactory to the holders of senior indebtedness, all amounts due and owing thereunder before we pay the holders of the notes. The

indenture will require that we promptly notify holders of senior indebtedness if payment of the notes is accelerated because of an event of default under the indenture.

We may not make any payment on the notes or purchase or otherwise acquire the notes if:

- a default in the payment of any senior indebtedness occurs and is continuing beyond any applicable period of grace, or
- any other default under the terms of designated senior indebtedness occurs and is continuing that permits (or with the giving of notice or passage of time would permit) holders of the designated senior indebtedness to accelerate its maturity and the trustee receives a payment blockage notice from us or any other person permitted to give such notice under the indenture.

We are required to resume payments on the notes:

- in case of a payment default of senior indebtedness, upon the date on which such default is cured or waived or ceases to exist, and
- in case of a nonpayment default under the terms of designated senior indebtedness, the earliest to occur of (i) the date on which such nonpayment default is cured or waived or ceases to exist, (ii) 179 days after the date on which the payment blockage notice is received and (iii) the date such payment blockage period shall have been terminated by written notice to us or the trustee from the person initiating such payment blockage period; provided, however, that if the maturity of such designated senior indebtedness is accelerated, no payment may be made on the notes until such designated senior indebtedness has been paid in full or such acceleration has been cured or waived.

No new period of payment blockage may be commenced for a default unless 365 days have elapsed since our receipt of the prior payment blockage notice. No nonpayment default that existed or was continuing on the date of delivery of any payment blockage notice to the trustee will be, or can be made, the basis for the commencement of a subsequent payment blockage period whether or not within a period of 365 consecutive days.

As a result of these subordination provisions, in the event of our bankruptcy, dissolution or reorganization, holders of senior indebtedness may receive more, ratably, and holders of the notes may receive less, ratably, than our other creditors. These subordination provisions will not prevent the occurrence of any event of default under the indenture.

If either the trustee or any holder of notes receives any payment or distribution of our assets in contravention of these subordination provisions before all senior indebtedness is paid in full, then such payment or distribution will be held by the recipient in trust for the benefit of holders of senior indebtedness to the extent necessary to make payment in full of all senior indebtedness remaining unpaid.

The notes are not guaranteed by any of our existing or future subsidiaries. Our subsidiaries are separate legal entities and have no obligation, contingent or otherwise, to pay any amount due pursuant to the notes or to make any funds available for that purpose. As a result, the notes effectively rank junior in right of payment to all existing and future debt and other liabilities (including trade payables) of our subsidiaries. We are an operating entity that also conducts a significant portion of our business through our subsidiaries. Our operating cash flows and consequently our ability to service our debt, including the notes, is therefore partially dependent upon our subsidiaries' earnings and their distributions of those earnings to us and may also be dependent upon loans, advances or other payments of funds to us by those subsidiaries. Our subsidiaries' ability to make payments may be subject to the availability of sufficient surplus funds, the terms of such subsidiaries' indebtedness, applicable laws, contractual restrictions and other factors.

At July 1, 2006, on a pro forma basis after giving effect to the acquisition of Excel Technology, we had approximately \$201.2 million of indebtedness outstanding, including \$1.2 million of senior indebtedness,

and our subsidiaries had approximately \$137.0 million of indebtedness and other liabilities, including trade payables, but excluding inter-company indebtedness, all of which would be effectively senior in right of payment to the notes. Neither we nor our subsidiaries will be restricted under the indenture from incurring additional senior indebtedness or other additional indebtedness. The pro forma total liabilities are based on preliminary estimates, evaluations and other data currently available and will be revised as we complete the valuation studies necessary to determine the fair values of liabilities we expect to assume and the related allocations of purchase price. Accordingly, the pro forma liabilities will change as a result of the final purchase price allocation and the differences may be material.

We are obligated to pay reasonable compensation to the trustee. We will indemnify the trustee against any losses, liabilities or expenses incurred by it in connection with its duties. The trustee's claims for such payments will be senior to the claims of the note holders.

Designated senior indebtedness means any senior indebtedness that is specifically identified by us in the instrument governing or evidencing the indebtedness or the assumption or guarantee thereof (or related agreements or documents to which we are a party) as designated senior indebtedness for purposes of the indenture, provided that such instrument, agreement or other document may place limitations and conditions on the right of such senior indebtedness to exercise the rights of designated senior indebtedness.

Indebtedness means:

- (1) all of our indebtedness, obligations and other liabilities, contingent or otherwise, (A) for borrowed money, including overdrafts, foreign exchange contracts, currency exchange agreements, interest rate protection agreements, and any loans or advances from banks, whether or not evidenced by notes or similar instruments, or (B) evidenced by credit or loan agreements, bonds, debentures, notes or similar instruments, or incurred in connection with the acquisition of any property, services or assets, whether or not the recourse of the lender is to the whole of our assets or to only a portion thereof, other than any account payable or other accrued current liability or obligation to trade creditors representing the purchase price or cost of materials or services obtained in the ordinary course of business;
- (2) all of our reimbursement obligations and other liabilities, contingent or otherwise, with respect to letters of credit, bank guarantees, bankers acceptances, surety bonds, performance bonds or other guaranty of contractual performance;
- (3) all of our obligations and other liabilities, contingent or otherwise, in respect of leases required, in conformity with GAAP, to be accounted for as capitalized lease obligations on our balance sheet or for a financing purpose;
- (4) all of our obligations and other liabilities, contingent or otherwise, under any lease or related document, including a purchase agreement, conditional sale or other title retention agreement, in connection with the lease of real property or improvements thereon (or any personal property included as part of any such lease) which provides that we are contractually obligated to purchase or cause a third party to purchase the leased property or pay an agreed upon residual value of the leased property, including our payment obligations under such lease or related document to purchase or cause a third party to purchase such leased property or pay an agreed upon residual value of the leased property to the lessor;
- (5) all of our obligations, contingent or otherwise, with respect to an interest rate or other swap, cap, floor or collar agreement or hedge agreement, forward contract or other similar instrument or agreement or foreign currency hedge, exchange, purchase or similar instrument or agreement;

(6) all of our direct or indirect guaranties or similar agreements by us in respect of, and all of our payment obligations or monetary liabilities, contingent or otherwise, to purchase or otherwise acquire or otherwise assure a creditor against loss in respect of, indebtedness, obligations or liabilities of another person of the kinds described in clauses (1) through (5);

(7) all indebtedness or other obligations of the kinds described in clauses (1) through (5) secured by any mortgage, pledge, lien or other encumbrance existing on property that is owned or held by us, regardless of whether the indebtedness or other obligation secured thereby shall have been assumed by us; and

(8) any and all deferrals, renewals, extensions, refinancings and refundings of, or amendments, modifications or supplements to, any indebtedness, obligation or liability of the kinds described in clauses (1) through (7).

Senior indebtedness means the principal of, premium, if any, interest, including any interest accruing after the commencement of any bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowed as a claim in the proceeding, and rent payable on or termination payment with respect to or in connection with, and all fees, costs, expenses and other amounts accrued or due on or in connection with, our indebtedness, whether secured or unsecured, absolute or contingent, due or to become due, outstanding on the date of the indenture or thereafter created, incurred, assumed, guaranteed or in effect guaranteed by us, including all deferrals, renewals, extensions or refundings of, or amendments, modifications or supplements to, the foregoing. Senior indebtedness does not include:

(1) indebtedness that expressly provides that such indebtedness will not be senior in right of payment to the notes or expressly provides that such indebtedness is on parity with or junior in right of payment to the notes; and

(2) any indebtedness to any of our majority-owned subsidiaries, other than indebtedness to such subsidiaries arising by reason of guarantees by us of indebtedness of any such subsidiary to a person that is not our subsidiary.

Conversion Rights

Holders may convert their notes prior to maturity based on an initial conversion rate of 26.1288 shares per \$1,000 principal amount of notes (equivalent to an initial conversion price of approximately \$38.27 per share), only if the conditions for conversion described below are satisfied. Holders who convert will receive cash and, at our option as described below, common stock upon conversion. The conversion rate will be subject to adjustment as described below. A note for which a holder has delivered a fundamental change repurchase notice, as described below, requiring us to purchase the note may be surrendered for conversion only if such notice is withdrawn in accordance with the indenture. A holder may convert fewer than all of such holder's notes so long as the notes converted are an integral multiple of \$1,000 principal amount.

In lieu of delivering shares of our common stock upon conversion of any note, a holder will receive, for each \$1,000 principal amount of notes surrendered for conversion:

- cash in an amount equal to the lesser of (1) \$1,000 and (2) the conversion value, as defined below; and
- if the conversion value is greater than \$1,000, a number of shares of our common stock, which we refer to as the remaining shares, equal to the sum of the daily share amounts, as defined below, for each of the ten consecutive trading days in the conversion reference period, as defined below, appropriately adjusted to reflect stock splits, stock dividends, combinations or similar events

occurring during the conversion reference period, subject to our right to deliver cash in lieu of all or a portion of such remaining shares as described below; and

provided that in no event shall the aggregate number of remaining shares per \$1,000 principal amount of notes exceed the aggregate share cap, as defined below.

The conversion value for each \$1,000 principal amount of notes means the average of the daily conversion values, as defined below, for each of the ten consecutive trading days of the conversion reference period.

The daily conversion value means, with respect to any trading day, the product of (1) the applicable conversion rate and (2) the volume weighted average price of our common stock on such trading day.

The conversion reference period means:

- for notes that are converted during the one month period prior to the maturity date of the notes, the ten consecutive trading days beginning on the third trading day following the maturity date; and
- in all other instances, the ten consecutive trading days beginning on the third trading day following the conversion date.

The conversion date with respect to a note means the date on which the holder of the note has complied with all requirements under the indenture to convert such note.

The daily share amount means, for each trading day of the conversion reference period and each \$1,000 principal amount of notes surrendered for conversion, a number of shares (but in no event less than zero) determined by the following formula:

$$\left(\frac{\text{volume weighted average price per share for such trading day}}{\text{volume weighted average price per share for such trading day}} \times \text{applicable conversion rate} \right) \times 10 = \$1,000$$

The aggregate share cap means 30 shares of our common stock per \$1,000 principal amount of notes, subject to adjustment upon the occurrence of any of the events described in clauses (1) through (4) under Conversion Procedures below.

The volume weighted average price per share of our common stock on any trading day means such price as displayed on Bloomberg (or any successor service) page COHR equity VAP in respect of the period from 9:30 a.m. to 4:00 p.m., New York City time, on such trading day; or, if such price is not available, the volume weighted average price means the market value per share of our common stock on such day as determined by a nationally recognized independent investment banking firm retained for this purpose by us.

A trading day is any day on which the Nasdaq National Market or, if our common stock is not quoted on the Nasdaq National Market, the principal national or regional securities exchange on which our common stock is listed, is open for trading or, if our common stock is not so listed, admitted for trading or quoted, any business day. A trading day only includes those days that have a scheduled closing time of 4:00 p.m. (New York City time) or the then standard closing time for regular trading on the relevant exchange or trading system.

On any day prior to the first trading day of the applicable conversion reference period, we may specify a percentage of the daily share amount that will be settled in cash (the cash percentage). If we elect to specify a cash percentage, the amount of cash that we will deliver in respect of each trading day in the applicable conversion reference period will equal the product of: (1) the cash percentage, (2) the daily

share amount for such trading day and (3) the volume weighted average price of our common stock for such trading day (provided that after the consummation of a fundamental change in which the consideration is comprised entirely of cash, the amount used in this clause (3) will be the cash price per share received by holders of our common stock in such fundamental change). The number of shares deliverable in respect of each trading day in the applicable conversion reference period will be a percentage of the daily share amount equal to 100% minus the cash percentage. If we do not specify a cash percentage by the start of the applicable conversion reference period, we must settle 100% of the daily share amount for each trading day in the applicable conversion reference period with shares of our common stock; provided, however, that we will pay cash in lieu of fractional shares otherwise issuable upon conversion of such note.

A holder of a note otherwise entitled to a fractional share will receive cash equal to the applicable portion of the arithmetic average of the volume weighted average price of our common stock for each of the ten consecutive trading days of the conversion reference period.

The conversion value, daily share amount and the number of shares, if any, to be issued upon conversion of the notes will be determined by us at the end of the conversion reference period. Upon conversion of a note, we will pay the cash and deliver the shares of common stock, as applicable, as promptly as practicable after the later of the conversion date and the date all calculations necessary to make such payment and delivery have been made, but in no event later than five business days after the later of such dates.

The ability to surrender notes for conversion will expire at the close of business on the business day immediately preceding the stated maturity date.

Conversion Based on Common Stock Price

Holders may surrender notes for conversion during any calendar quarter beginning after June 30, 2006, and only during such calendar quarter, if, as of the last day of the preceding calendar quarter, the closing price of our common stock for at least 20 trading days in a period of 30 consecutive trading days ending on the last trading day of such preceding calendar quarter is more than 120% of the conversion price, as defined below, per share of common stock on the last day of such preceding calendar quarter, which we refer to as the conversion trigger price.

The closing price of our common stock on any trading day means the reported last sale price per share (or, if no last sale price is reported, the average of the bid and ask prices per share or, if more than one in either case, the average of the average bid and the average ask prices per share) on such date reported by the Nasdaq National Market or, if our common stock is not quoted on the Nasdaq National Market, as reported by the principal national or regional securities exchange on which our common stock is listed or otherwise as provided in the indenture.

The conversion price per share of common stock as of any day will equal the result obtained by dividing \$1,000 by the then applicable conversion rate, rounded to the nearest cent.

The conversion trigger price is \$45.93, which is 120% of the initial conversion price per share of common stock, subject to adjustment upon occurrence of any of the events in respect of which the conversion rate would be subject to adjustment as described under Conversion Procedure below.

The conversion agent will, on our behalf, determine at the beginning of each calendar quarter commencing at any time after June 30, 2006 whether the notes are convertible as a result of the price of our common stock and notify us and the trustee.

Conversion Based on Trading Price of Notes

Holders may surrender notes for conversion during any five business day period after any five consecutive trading day period in which the trading price per \$1,000 principal amount of notes, as determined following a request by a holder of notes in accordance with the procedures described below, for each day of that period was less than 98% of the product of the closing price of our common stock for each day in that period and the conversion rate per \$1,000 principal amount of notes (the trading price condition).

The trading price of the notes on any date of determination means the average of the secondary market bid quotations obtained by the trustee for \$5 million principal amount of the notes at approximately 3:30 p.m., New York City time, on such determination date from three nationally recognized securities dealers we select; provided that if three such bids cannot reasonably be obtained by the trustee, but two such bids are obtained, then the average of the two bids shall be used, and if only one such bid can reasonably be obtained by the trustee, that one bid shall be used. If the trustee cannot reasonably obtain at least one bid for \$5 million principal amount of the notes from a nationally recognized securities dealer, then the trading price per \$1,000 principal amount of notes will be deemed to be less than 98% of the product of the closing price of our common stock and the conversion rate per \$1,000 principal amount of notes.

In connection with any conversion upon satisfaction of the trading price condition, the trustee shall have no obligation to determine the trading price of the notes unless we have requested such determination; and we shall have no obligation to make such request unless a holder of the notes provides us with reasonable evidence that the trading price per \$1,000 principal amount of notes would be less than 98% of the product of the closing price of our common stock and the number of shares of common stock issuable upon conversion of \$1,000 principal amount of the notes. At such time, we shall instruct the trustee to determine the trading price of the notes beginning on the next trading day and on each successive trading day until the trading price per \$1,000 principal amount of the notes is greater than 98% of the product of the closing price of our common stock and the number of shares issuable upon conversion of \$1,000 principal amount of the notes.

Conversion Upon Specified Distributions to Holders of Our Common Stock

If we:

- distribute to all holders of our common stock certain rights (including rights under a stockholder rights agreement) or warrants entitling them to purchase, for a period expiring within 45 days of the date of issuance, common stock at less than the then current market price of our common stock, or
- distribute to all holders of our common stock our assets, debt securities or certain rights to purchase our securities, which distribution has a per share value exceeding 7.5% of the closing price of our common stock on the business day preceding the declaration date for such distribution,

we will notify the holders of notes at least 20 days prior to the ex-dividend date for such distribution; provided that if we distribute rights pursuant to a stockholder rights agreement, we will notify the holders of the notes on the business day after we are required to give notice generally to our stockholders pursuant to such stockholder rights agreement if such date is less than 20 days prior to the date of such distribution. Once we have given the notice, holders may surrender their notes for conversion at any time until the earlier of the close of business on the business day prior to the ex-dividend date or our announcement that such distribution will not take place. A holder may not convert its notes under this conversion provision upon the specified distributions above if the holder will participate in such distribution due to the participation of holders of the notes in such distribution.

Conversion Upon Fundamental Change

We will notify the holders of notes and the trustee at least 10 trading days prior to the anticipated effective date of any fundamental change, as defined below under Purchase at Holders Option Upon Fundamental Change, that we know or reasonably should know will occur. If we do not know, and should not reasonably know, that a fundamental change will occur until a date that is within 10 trading days before the anticipated effective date of such fundamental change, we will notify the holders and the trustee promptly after we have knowledge of such fundamental change. Holders may surrender notes for conversion at any time beginning 10 trading days before the anticipated effective date of a fundamental change and until the trading day prior to the fundamental change repurchase date.

Conversion at Maturity

Holders may surrender notes for conversion at any time during the period beginning on February 1, 2011 and ending at the close of business on the business day immediately preceding the maturity date.

Conversion Procedures

To convert a note, a holder must:

- complete and manually sign a conversion notice, a form of which is on the back of the note, and deliver the conversion notice to the conversion agent;
- surrender the note to the conversion agent;
- if required by the conversion agent, furnish appropriate endorsements and transfer documents; and
- if required, pay all transfer or similar taxes.

On conversion of a note, a holder will not receive, except as described below, any cash payment representing any accrued interest. Instead, accrued interest will be deemed paid by the shares of common stock (or any cash in lieu thereof) received by the holder on conversion. Delivery to the holder of the full number of shares of common stock into which the note is convertible (or any cash in lieu thereof), together with any cash payment of such holder's fractional shares, will thus be deemed:

- to satisfy our obligation to pay the principal amount of a note; and
- to satisfy our obligation to pay accrued and unpaid interest.

As a result, accrued interest is deemed paid in full rather than cancelled, extinguished or forfeited. Holders of notes surrendered for conversion during the period from the close of business on any regular record date next preceding any interest payment date to the opening of business of such interest payment date will receive the semiannual interest payable on such notes on the corresponding interest payment date notwithstanding the conversion, and such notes upon surrender must be accompanied by funds equal to the amount of such payment, unless such notes have been called for redemption or have been surrendered for conversion following the regular record date immediately preceding the final interest payment date, in which case no such payment will be required.

The conversion rate will not be adjusted for accrued interest. For a discussion of the tax treatment of a conversion of the notes, see Certain U.S. Federal Income Tax Considerations.

We will adjust the conversion rate for certain events, including:

- (1) the issuance of our common stock as a dividend or distribution to holders of our common stock;
- (2) some subdivisions and combinations of our common stock;
- (3) the issuance to all holders of our common stock of some rights or warrants entitling them for a period expiring within 45 days of such issuance to purchase our common stock, or securities convertible into our common stock, at less than, or having a conversion price per share less than, the then current market price of our common stock;
- (4) the dividend or other distribution to all holders of our common stock of shares of our capital stock, other than common stock, or evidences of our indebtedness or our assets, including securities (but excluding those rights and warrants referred to above and dividends and distributions in connection with a reclassification, change, consolidation, merger, combination, liquidation, dissolution, winding up, sale or conveyance resulting in a change in the conversion consideration, or pursuant to any stockholder rights plan or dividends or distributions paid exclusively in cash);
- (5) dividends or other distributions consisting exclusively of cash to all holders of our common stock; and
- (6) payments to holders in respect of a tender offer or exchange offer for our common stock by us or any of our subsidiaries to the extent that the cash and fair market value of any other consideration included in the payment per share exceeds the closing price of our common stock on the trading day following the last date on which tenders or exchanges may be made pursuant to such tender offer or exchange offer.

In the event that we pay a dividend or make a distribution to all holders of our common stock consisting of capital stock of, or similar equity interests in, a subsidiary or other business unit of ours, the conversion rate will be adjusted, unless we make an equivalent distribution to holders of notes, based on the market value of the securities so distributed relative to the market value of our common stock, in each case based on the average closing prices of those securities for the 10 trading days commencing on and including the fifth trading day after the date on which ex-dividend trading commences for such dividend or distribution on the Nasdaq National Market or such other national or regional exchange or market on which the securities are then listed or quoted.

In addition, the indenture will provide that upon conversion of the notes, holders will receive, to the extent that we deliver shares of common stock upon such conversion, the rights related to such common stock pursuant to any future shareholder rights plan, whether or not such rights have separated from the common stock at the time of such conversion. However, there will not be any adjustment to the conversion privilege or conversion rate as a result of:

- the issuance of such rights;
- the distribution of separate certificates representing such rights;
- the exercise or redemption of such rights in accordance with any rights agreement; or
- the termination or invalidation of such rights.

Notwithstanding the foregoing, if a holder of notes exercising its right of conversion after the distribution of rights pursuant to such rights plan in effect at the time of such conversion is not entitled to receive the rights that would otherwise be attributable (but for the date of conversion) to the shares of common stock to be received upon such conversion, if any, the conversion rate will be adjusted as though the rights were being distributed to holders of common stock on the date the rights become separable from

such stock. If such an adjustment is made and such rights are later redeemed, repurchased, invalidated or terminated, then a corresponding reversing adjustment will be made to the conversion rate on an equitable basis. Our existing rights plan does not entitle a holder to receive rights that would otherwise be attributable (but for the date of conversion) to the shares of common stock to be received upon conversion. See Description of Capital Stock for a description of our existing rights plan.

In the case of the following events (each, a business combination):

- any recapitalization, reclassification or change of our common stock, other than changes resulting from a subdivision or combination;
- a consolidation, merger or combination involving us;
- a sale, conveyance or lease to another corporation of all or substantially all of our property and assets, other than to one or more of our subsidiaries; or
- a statutory share exchange

in each case as a result of which holders of our common stock are entitled to receive stock, other securities, other property or assets (including cash or any combination thereof) with respect to or in exchange for our common stock, the holders of the notes then outstanding will be entitled thereafter to convert those notes into the kind and amount of shares of stock, other securities or other property or assets (including cash or any combination thereof) which they would have owned or been entitled to receive upon such business combination had such notes been converted into our common stock (assuming for such purposes such conversion were settled entirely in our common stock and without giving effect to any adjustment to the conversion rate with respect to a business combination constituting a fundamental change as described in Make Whole Premium Upon Fundamental Change) immediately prior to such business combination, except that such holders will not receive a make whole premium if such holder does not convert its notes in connection with the relevant fundamental change. In the event holders of our common stock have the opportunity to elect the form of consideration to be received in such business combination, we will make adequate provision whereby the notes shall be convertible from and after the effective date of such business combination into the form of consideration elected by a majority of our stockholders in such business combination. Appropriate provisions will be made, as determined in good faith by our Board of Directors, to preserve the net share settlement provisions of the notes following such business combination to the extent feasible. We may not become a party to any such transaction unless its terms are consistent with the preceding. None of the foregoing provisions shall affect the right of a holder of notes to convert its notes into shares of our common stock prior to the effective date.

The indenture permits us to increase the conversion rate, to the extent permitted by law, for any period of at least 20 days. In that case we will give at least 15 days notice of such increase. We may also make such increase in the conversion rate, in addition to those set forth above, as our Board of Directors deems advisable to avoid or diminish any U.S. federal income tax to holders of our common stock resulting from any dividend or distribution of stock (or rights to acquire stock) or from any event treated as such for U.S. federal income tax purposes.

For U.S. federal income tax purposes, adjustments to the conversion rate (or failures to make such adjustments) that have the effect of increasing the holders' proportionate interests in our assets or earnings may in some circumstances result in a taxable deemed distribution to the holders. See Certain U.S. Federal Income Tax Considerations. We will not be required to adjust the conversion rate unless the adjustment would result in a change of at least 1% of the conversion rate. However, we will carry forward any adjustments that are less than 1% of the conversion rate and take them into account when determining subsequent adjustments. We will not make any adjustments if holders of notes are permitted to participate in the transactions described above in clauses (1) through (6) that would otherwise require adjustment of the conversion rate. Except as stated above, the conversion rate will not be adjusted for the issuance of our

common stock or any securities convertible into or exchangeable for our common stock or carrying the right to purchase our common stock or any such security.

Upon determining that the holders are or will be entitled to convert their notes in accordance with these provisions, we will promptly issue a press release and use our reasonable efforts to post such information on our website or otherwise publicly disclose this information.

Notwithstanding the foregoing, in no event shall the conversion rate as adjusted in accordance with the foregoing exceed 33.9673 shares of our common stock per \$1,000 principal amount of notes, other than on account of proportional adjustments to the conversion rate in the manner set forth in clauses (1) through (4) above.

Purchase at Holders Option Upon Fundamental Change

If a fundamental change occurs, each holder of notes will have the right to require us to repurchase all or any portion of that holder's notes that is equal to \$1,000 or an integral multiple of \$1,000, on the date fixed by us, which we refer to as the fundamental change purchase date, that is not less than 30 nor more than 45 days after the date we give notice of the fundamental change, at a fundamental change purchase price equal to 100% of the principal amount of the notes to be repurchased, together with interest accrued and unpaid to, but excluding, the fundamental change purchase date. If such purchase date is after a record date but on or prior to an interest payment date, however, then the interest payable on such date will be paid to the holder of record of the notes on the relevant record date.

Within 30 days after the occurrence of a fundamental change, we are required to give notice to all holders of notes, as provided in the indenture, of the occurrence of the fundamental change and of their resulting repurchase right. We must also deliver a copy of our notice to the trustee.

In order to exercise the repurchase right upon a fundamental change, a holder must deliver prior to the purchase date a fundamental change purchase notice stating among other things:

- if certificated notes have been issued, the certificate numbers of the notes to be delivered for purchase;
- the portion of the principal amount of notes to be purchased, in integral multiples of \$1,000; and
- that the notes are to be purchased by us pursuant to the applicable provisions of the notes and the indenture.

If the notes are not in certificated form, a holder's fundamental change purchase notice must comply with appropriate DTC procedures.

A holder may withdraw any fundamental change purchase notice by a written notice of withdrawal delivered to the paying agent prior to the close of business on the business day prior to the fundamental change purchase date. The notice of withdrawal must state:

- the principal amount of the withdrawn notes;
- if certificated notes have been issued, the certificate numbers of the withdrawn notes; and
- the principal amount, if any, of the notes which remains subject to the fundamental change purchase notice.

In connection with any purchase offer in the event of a fundamental change, we will, if required:

- comply with the provisions of Rule 13e-4, Rule 14e-1, and any other tender offer rules under the Securities Exchange Act of 1934, or the Exchange Act, which may then be applicable; and
- file a Schedule TO or any other required schedule under the Exchange Act.

Payment of the fundamental change purchase price for a note for which a fundamental change purchase notice has been delivered and not validly withdrawn is conditioned upon delivery of the note, together with necessary endorsements, to the paying agent at any time after delivery of such fundamental change purchase notice. Payment of the fundamental change purchase price for the note will be made promptly following the later of the fundamental change purchase date or the time of delivery of the note.

If the paying agent holds money or securities sufficient to pay the fundamental change purchase price of the note on the business day following the fundamental change purchase date in accordance with the terms of the indenture, then, immediately after the fundamental change purchase date, the note will cease to be outstanding and interest on such note will cease to accrue, whether or not the note is delivered to the paying agent. Thereafter, all other rights of the holder will terminate, other than the right to receive the fundamental change purchase price upon delivery of the note.

A fundamental change will be deemed to have occurred upon a change of control or a termination of trading, each as defined below.

A change of control will be deemed to have occurred at such time after the original issuance of the notes when the following has occurred:

- the acquisition by any person of beneficial ownership, directly or indirectly, through a purchase, merger or other acquisition transaction or series of transactions of shares of our capital stock entitling that person to exercise 50% or more of the total voting power of all shares of our capital stock entitled to vote generally in elections of directors, other than any acquisition by us, any of our subsidiaries or any of our employee benefit plans; or
- our consolidation or merger with or into any other person, any merger of another person into us, or any conveyance, transfer, sale, lease or other disposition of all or substantially all of our properties and assets to another person other than to one or more of our wholly-owned subsidiaries, other than:
 - any transaction:
 - that does not result in any reclassification, conversion, exchange or cancellation of outstanding shares of our capital stock, and
 - pursuant to which holders of our capital stock immediately prior to the transaction have the entitlement to exercise, directly or indirectly, 50% or more of the total voting power of all shares of our capital stock entitled to vote generally in the election of directors of the continuing or surviving person immediately after the transaction; or
 - any merger solely for the purpose of changing our jurisdiction of incorporation and resulting in a reclassification, conversion or exchange of outstanding shares of common stock solely into shares of common stock of the surviving entity; or
 - during any consecutive two-year period, individuals who at the beginning of that two-year period constituted our board of directors, together with any new directors whose election to our board of directors, or whose nomination for election by our stockholders, was approved by a vote of a majority of the directors then still in office who were either directors at the beginning of such period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority of our board of directors then in office.

Notwithstanding the foregoing, it will not constitute a change of control if 100% of the consideration for the common stock (excluding cash payments for fractional shares and cash payments made in respect of dissenters' appraisal rights) in the transaction or transactions constituting the change of control consists of common stock or American Depositary Shares representing shares of common stock traded on a U.S.

national securities exchange or quoted on the Nasdaq National Market, or which will be so traded or quoted when issued or exchanged in connection with the change of control, and as a result of such transaction or transactions the notes become convertible solely into cash in an amount equal to the lesser of \$1,000 and the conversion value and, if the conversion value is greater than \$1,000, payment of the excess value in the form of such common stock, subject to the right to deliver cash in lieu of all or a portion of such remaining shares in substantially the same manner as described above; provided that, with respect to an entity organized under the laws of a jurisdiction outside the U.S., such entity has a worldwide total market capitalization of its equity securities of at least three times the market capitalization of Coherent before giving effect to the consolidation or merger.

A termination of trading will be deemed to have occurred if our common stock or other common stock into which the notes are convertible is neither listed for trading on a United States national securities exchange nor approved for listing on Nasdaq or any similar United States system of automated dissemination of quotations of securities prices, or traded in over-the-counter securities markets, and no American Depositary Shares or similar instruments for such common stock are so listed or approved for listing in the United States.

For purposes of the foregoing, beneficial ownership shall be determined in accordance with Rule 13d-3 promulgated by the SEC under the Exchange Act. The term person includes any syndicate or group which would be deemed to be a person under Section 13(d)(3) of the Exchange Act.

Rule 13e-4 under the Exchange Act requires the dissemination of certain information to security holders if an issuer tender offer occurs and may apply if the repurchase option becomes available to holders of the notes. We will comply with this rule to the extent applicable at that time.

We may, to the extent permitted by applicable law, at any time purchase the notes in the open market or by tender at any price or by private agreement. Any note so purchased by us may, to the extent permitted by applicable law, be reissued or resold or may be surrendered to the trustee for cancellation. Any notes surrendered to the trustee may not be reissued or resold and will be canceled promptly.

No notes may be purchased by us at the option of holders upon the occurrence of a fundamental change if there has occurred and is continuing an event of default with respect to the notes, other than a default in the payment of the fundamental change purchase price with respect to the notes.

The preceding provisions would not necessarily protect holders of the notes if highly leveraged or other transactions involving us occur that may adversely affect holders.

Our ability to repurchase notes upon the occurrence of a fundamental change is subject to important limitations. The occurrence of a fundamental change could cause an event of default under, or be prohibited or limited by, the terms of our indebtedness. Further, we cannot assure you that we would have the financial resources, or would be able to arrange financing, to pay the repurchase price for all the notes that might be delivered by holders of notes seeking to exercise the repurchase right. Any failure by us to repurchase the notes when required following a fundamental change would result in an event of default under the indenture. Any such default may, in turn, cause a default under our other indebtedness, if any.

Make Whole Premium Upon Fundamental Change

If a fundamental change, as defined above under Purchase at Holders Option Upon Fundamental Change, occurs, we will pay, to the extent described below, a make whole premium if you convert your notes in connection with any such transaction by increasing the conversion rate applicable to such notes if and as required below. A conversion of the notes by a holder will be deemed for these purposes to be in connection with a fundamental change if the conversion notice is received by the conversion agent on or subsequent to the date 10 trading days prior to the date announced by us as the anticipated effective date of the fundamental change but before the close of business on the business day immediately preceding the

related fundamental change purchase date. Any make whole premium will have the effect of increasing the amount of any cash, securities or other assets otherwise due to holders of notes upon conversion. Any increase in the applicable conversion rate will be determined by reference to the table below and is based on the date on which the fundamental change becomes effective, which we refer to as the effective date, and the price, which we refer to as the stock price, paid, or deemed to be paid, per share of our common stock in the transaction constituting the fundamental change, subject to adjustment as described below. If holders of our common stock receive only cash in the fundamental change, the stock price shall be the cash amount paid per share of our common stock. In all other cases, the stock price shall be the average of the closing prices of our common stock for each of the 10 trading days immediately prior to but not including the effective date.

The following table shows the amount, if any, by which the applicable conversion rate will increase for each hypothetical stock price and effective date set forth below.

Make Whole Premium Upon Fundamental Change (Increase in Applicable Conversion Rate)

| Stock Price on Effective Date | March 13, 2006 | March 1, 2007 | March 1, 2008 | March 1, 2009 | March 1, 2010 | March 1, 2011 |
|-------------------------------|----------------|---------------|---------------|---------------|---------------|---------------|
| \$29.44 | 7.83 | 7.83 | 7.83 | 7.83 | 7.83 | 0.00 |
| \$35.00 | 5.62 | 5.31 | 4.92 | 4.43 | 3.72 | 0.00 |
| \$40.00 | 4.38 | 3.99 | 3.54 | 2.95 | 2.09 | 0.00 |
| \$45.00 | 3.53 | 3.15 | 2.68 | 2.08 | 1.25 | 0.00 |
| \$50.00 | 2.94 | 2.57 | 2.12 | 1.56 | 0.82 | 0.00 |
| \$60.00 | 2.19 | 1.86 | 1.47 | 1.02 | 0.49 | 0.00 |
| \$80.00 | 1.46 | 1.22 | 0.95 | 0.64 | 0.32 | 0.00 |
| \$100.00 | 1.13 | 0.94 | 0.73 | 0.50 | 0.26 | 0.00 |
| \$120.00 | 0.93 | 0.77 | 0.60 | 0.41 | 0.21 | 0.00 |

The actual stock price and effective date may not be set forth on the table, in which case:

- if the actual stock price on the effective date is between two stock prices on the table or the actual effective date is between two effective dates on the table, the amount of the conversion rate adjustment will be determined by a straight-line interpolation between the adjustment amounts set forth for the two stock prices and the two effective dates on the table based on a 365-day year, as applicable.
- if the stock price on the effective date exceeds \$120.00 per share, subject to adjustment as described below, no adjustment to the applicable conversion rate will be made.
- if the stock price on the effective date is less than \$29.44 per share, subject to adjustment as described below, no adjustment to the applicable conversion rate will be made.

The stock prices set forth in the first column of the table above will be adjusted as of any date on which the conversion rate of the notes is adjusted as set forth under Conversion Procedures above. The adjusted stock prices will equal the stock prices applicable immediately prior to such adjustment multiplied by a fraction, the numerator of which is the conversion rate immediately prior to the adjustment giving rise to the stock price adjustment and the denominator of which is the conversion rate as so adjusted. The conversion rate adjustment amounts set forth in the table above will be adjusted in the same manner as the conversion rate as set forth above under Conversion Procedures, other than by operation of an adjustment to the conversion rate by virtue of the make whole premium as described above.

Notwithstanding the foregoing, in no event will the conversion rate exceed 33.9673 per \$1,000 principal amount of notes, other than on account of proportional adjustments to the conversion rate in the manner set forth in clauses (1) through (4) under Conversion Procedures above.

The additional shares, if any, or any cash delivered to satisfy our obligations to holders that convert their notes in connection with a fundamental change will be delivered upon the later of the settlement date for the conversion and promptly following the effective date of the fundamental change transaction.

Our obligation to deliver the additional shares, or cash to satisfy our obligations, to holders that convert their notes in connection with a fundamental change could be considered a penalty, in which case the enforceability thereof would be subject to general principles of reasonableness of economic remedies.

Events of Default and Acceleration

The following are events of default under the indenture:

- default in the payment of any principal amount or fundamental change purchase price due with respect to the notes, when the same becomes due and payable, regardless of whether such payment is permitted pursuant to the subordination provisions of the indenture;
- default in payment of any interest (including additional interest) under the notes, which default continues for 30 days, regardless of whether such payment is permitted pursuant to the subordination provisions of the indenture;
- default in the delivery when due of all cash and any shares of common stock payable upon conversion with respect to the notes, which default continues for 15 days, regardless of whether such delivery is permitted pursuant to the subordination provisions of the indenture;
- our failure to comply with any of our other agreements in the notes or the indenture upon our receipt of notice of such default from the trustee or from holders of not less than 25% in aggregate principal amount of the notes, and the failure to cure (or obtain a waiver of) such default within 60 days after receipt of such notice;
- default in the payment of principal by the end of any applicable grace period or resulting in acceleration of other indebtedness of Coherent for borrowed money where the aggregate principal amount with respect to which the default or acceleration has occurred exceeds \$25 million and such acceleration has not been rescinded or annulled or such indebtedness repaid within a period of 30 days after written notice to us by the trustee or us and the trustee by the holders of at least 25% in aggregate principal amount of the notes, provided that if any such default is cured, waived, rescinded or annulled, then the event of default by reason thereof would not be deemed to have occurred; and
- certain events of bankruptcy, insolvency or reorganization affecting us or any of our significant subsidiaries.

If an event of default shall have happened and be continuing, either the trustee or the holders of not less than 25% in aggregate principal amount of the notes then outstanding may declare the principal of the notes and any accrued and unpaid interest through the date of such declaration immediately due and payable. In the case of certain events of bankruptcy or insolvency with respect to us, the principal amount of the notes together with any accrued interest through the occurrence of such event shall automatically become and be immediately due and payable.

Consolidation, Mergers or Sales of Assets

The indenture provides that we may not consolidate with or merge into any person (unless we are the surviving person) or convey, transfer or lease our properties and assets substantially as an entity to another person, other than to one or more of our wholly-owned subsidiaries, unless:

- the resulting, surviving or transferee person is a corporation, limited liability company, partnership, trust or other business entity organized and existing under the laws of the United States, any state thereof or the District of Columbia, and such corporation (if other than us) assumes all our obligations under the notes and the indenture;
- after giving effect to the transaction no event of default, and no event that, after notice or passage of time, would become an event of default, has occurred and is continuing; and
- other conditions described in the indenture are met.

Upon the assumption of our obligations by such corporation in such circumstances, subject to certain exceptions, we shall be discharged from all obligations under the notes and the indenture. Although such transactions are permitted under the indenture, certain of the foregoing transactions occurring could constitute a fundamental change of our company, permitting each holder to require us to purchase the notes of such holder as described above. An assumption of our obligations under the notes and the indenture by such corporation might be deemed for United States federal tax purposes to be an exchange of the notes for new notes by the beneficial owners thereof, resulting in recognition of gain or loss for such purposes and possibly other adverse tax consequences to the beneficial owner. You should consult your own tax advisors regarding the tax consequences of such an assumption.

Modification

The trustee and we may amend the indenture or the notes with the consent of the holders of not less than a majority in aggregate principal amount of the notes then outstanding. However, the consent of the holder of each outstanding note affected is required to:

- alter the manner of calculation or rate of accrual of interest on the note or change the time of payment;
- make the note payable in money or securities other than that stated in the note;
- change the stated maturity of the note;
- reduce the principal amount, redemption price or fundamental change purchase price (including any make whole premium payable) with respect to the note;
- make any change that adversely affects the conversion rights of a holder in any material respect other than as provided in the indenture;
- make any change that adversely affects the right of a holder to require us to purchase the note;
- impair the right to institute suit for the enforcement of any payment with respect to the note or with respect to conversion of the note;
- change the currency of payment of principal of, or interest on, the note;
- except as otherwise permitted or contemplated by provisions of the indenture concerning specified reclassification or corporation reorganizations, adversely affect the conversion rights of the note; or
- change the provisions in the indenture that relate to modifying or amending the indenture.

Without the consent of any holder of notes, the trustee and we may amend the indenture:

- to evidence a successor to us and the assumption by that successor of our obligations under the indenture and the notes;
- to add to our covenants for the benefit of the holders of the notes or to surrender any right or power conferred upon us;
- to secure our obligations in respect of the notes;
- to evidence and provide the acceptance of the appointment of a successor trustee under the indenture;
- to comply with the requirements of the SEC in order to effect or maintain qualification of the indenture under the Trust Indenture Act of 1939, as amended, as contemplated by the indenture or otherwise;
- to cure any ambiguity, omission, defect or inconsistency in the indenture; or
- to make any change that does not adversely affect the rights of the holders of the notes in any material respect.

The holders of a majority in aggregate principal amount of the outstanding notes may, on behalf of all the holders of all notes:

- waive compliance by us with restrictive provisions of the indenture, as detailed in the indenture; or
- waive any past default under the indenture and its consequences, except a default in the payment of any amount due, or in the obligation to deliver common stock or cash, with respect to any note or in respect of any provision which under the indenture cannot be modified or amended without the consent of the holder of each outstanding note affected.

Discharge of the Indenture

We may satisfy and discharge our obligations under the indenture by delivering to the trustee for cancellation all outstanding notes or by depositing with the trustee, the paying agent or the conversion agent, if applicable, after the notes have become due and payable, whether at stated maturity or any redemption date, or a fundamental change purchase date, or upon conversion or otherwise, cash or shares of common stock (as applicable under the terms of the indenture) sufficient to pay all of the outstanding notes and paying all other sums payable under the indenture.

Calculations in Respect of Notes

We are responsible for making all calculations called for under the notes. These calculations include, but are not limited to, determination of the average market prices of the notes and of our common stock. We will make all these calculations in good faith and, absent manifest error, our calculations are final and binding on holders of notes. We will provide a schedule of our calculations to the trustee, and the trustee is entitled to conclusively rely upon the accuracy of our calculations without independent verification.

Governing Law

The indenture and the notes are governed by, and construed in accordance with, the law of the State of New York.

Information Concerning the Trustee

U.S. Bank National Association will be the trustee, registrar, paying agent and conversion agent under the indenture for the notes.

Global Notes; Book Entry; Form

We will initially issue the notes in the form of one or more global securities. The global security will be deposited with the trustee as custodian for DTC and registered in the name of a nominee of DTC. Except as set forth below, the global security may be transferred, in whole and not in part, only to DTC or another nominee of DTC. You will hold your beneficial interests in the global security directly through DTC if you have an account with DTC or indirectly through organizations that have accounts with DTC. Notes in definitive certificated form (called "certificated securities") will be issued only in certain limited circumstances described below.

DTC has advised us that it is:

- a limited purpose trust company organized under the laws of the State of New York;
- a member of the Federal Reserve System;
- a clearing corporation within the meaning of the New York Uniform Commercial Code; and
- a clearing agency registered pursuant to the provisions of Section 17A of the Exchange Act.

DTC was created to hold securities of institutions that have accounts with DTC (called "participants") and to facilitate the clearance and settlement of securities transactions among its participants in such securities through electronic book-entry changes in accounts of the participants, thereby eliminating the need for physical movement of securities certificates. DTC's participants include securities brokers and dealers, which may include the initial purchaser, banks, trust companies, clearing corporations and certain other organizations. Access to DTC's book-entry system is also available to others such as banks, brokers, dealers and trust companies (called, the "indirect participants") that clear through or maintain a custodial relationship with a participant, whether directly or indirectly.

We expect that pursuant to procedures established by DTC upon the deposit of the global security with DTC, DTC will credit, on its book-entry registration and transfer system, the principal amount of notes represented by such global security to the accounts of participants. The accounts to be credited shall be designated by the initial purchaser. Ownership of beneficial interests in the global security will be limited to participants or persons that may hold interests through participants. Ownership of beneficial interests in the global security will be shown on, and the transfer of those beneficial interests will be effected only through, records maintained by DTC (with respect to participants' interests), the participants and the indirect participants.

The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of such securities in definitive form. These limits and laws may impair the ability to transfer or pledge beneficial interests in the global security.

Owners of beneficial interests in global securities who desire to convert their interests into common stock should contact their brokers or other participants or indirect participants through whom they hold such beneficial interests to obtain information on procedures, including proper forms and cut-off times, for submitting requests for conversion. So long as DTC, or its nominee, is the registered owner or holder of a global security, DTC or its nominee, as the case may be, will be considered the sole owner or holder of the notes represented by the global security for all purposes under the indenture and the notes. In addition, no owner of a beneficial interest in a global security will be able to transfer that interest except in accordance with the applicable procedures of DTC.

Except as set forth below, as an owner of a beneficial interest in the global security, you will not be entitled to have the notes represented by the global security registered in your name, will not receive or be entitled to receive physical delivery of certificated securities and will not be considered to be the owner or holder of any notes under the global security. We understand that under existing industry practice, if an owner of a beneficial interest in the global security desires to take any action that DTC, as the holder of the global security, is entitled to take, DTC would authorize the participants to take such action. Additionally, in such case, the participants would authorize beneficial owners owning through such participants to take such action or would otherwise act upon the instructions of beneficial owners owning through them.

We will make payments of principal of, premium, if any, and interest (including any additional interest) on the notes represented by the global security registered in the name of and held by DTC or its nominee to DTC or its nominee, as the case may be, as the registered owner and holder of the global security. Neither we, the trustee nor any paying agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial interests in the global security or for maintaining, supervising or reviewing any records relating to such beneficial interests.

We expect that DTC or its nominee, upon receipt of any payment of principal of, premium, if any, or interest (including any additional interest) on the global security, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of the global security as shown on the records of DTC or its nominee. We also expect that payments by participants or indirect participants to owners of beneficial interests in the global security held through such participants or indirect participants will be governed by standing instructions and customary practices and will be the responsibility of such participants or indirect participants. We will not have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial interests in the global security for any note or for maintaining, supervising or reviewing any records relating to such beneficial interests or for any other aspect of the relationship between DTC and its participants or indirect participants or the relationship between such participants or indirect participants and the owners of beneficial interests in the global security owning through such participants.

Transfers between participants in DTC will be effected in the ordinary way in accordance with DTC rules and will be settled in same-day funds.

DTC has advised us that it will take any action permitted to be taken by a holder of notes only at the direction of one or more participants to whose account the DTC interests in the global security is credited and only in respect of such portion of the aggregate principal amount of notes as to which such participant or participants has or have given such direction. However, if DTC notifies us that it is unwilling to be a depository for the global security or ceases to be a clearing agency or there is an event of default under the notes, DTC will exchange the global security for certificated securities which it will distribute to its participants and which will be legended, if required, as set forth under Transfer Restrictions. Although DTC is expected to follow the foregoing procedures in order to facilitate transfers of interests in the global security among participants of DTC, it is under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. Neither we nor the trustee will have any responsibility, or liability for the performance by DTC or the participants or indirect participants of their respective obligations under the rules and procedures governing their respective operations.

Registration Rights

We have entered into a registration rights agreement with the initial purchaser of the notes. Pursuant to the registration rights agreement, we will use our commercially reasonable efforts to keep the registration statement effective until the earliest of (1) the sale pursuant to the shelf registration statement of the notes and all of the shares of common stock issuable upon conversion of the notes, (2) the date

when the holders, other than holders that are our affiliates, of the notes and the common stock issuable upon conversion of the notes are able to sell all such securities immediately without restriction pursuant to the volume limitation provisions of Rule 144 under the Securities Act or any successor Rule thereto or otherwise and (3) the date that is two years from the original issuance of the notes offered hereby.

We will provide to each registered holder copies of the prospectus and take certain other actions as are required to permit unrestricted resales of the notes and the common stock issuable upon conversion of the notes. A holder who sells those securities pursuant to the shelf registration statement will be required to be named as a selling securityholder in the related prospectus supplement and to deliver a prospectus and prospectus supplement to purchasers and will be bound by the provisions of the registration rights agreement, which are applicable to that holder, including certain indemnification provisions.

After the shelf registration statement becomes or has been declared effective, upon receipt of any completed questionnaire, together with such other information as we may reasonably request from a holder of such notes, we will use our commercially reasonable efforts to file within 20 business days such amendments to the shelf registration statement or supplements to the related prospectus as are necessary to permit such holder to deliver such prospectus to purchasers of registrable securities, subject to our right to suspend the use of the prospectus below; provided that we will not be required to file a post-effective amendment more than one time in any calendar quarter for all such holders. Any holder that does not complete and deliver a questionnaire or provide such other information will not be named as a selling securityholder in the prospectus and therefore will not be permitted to sell any registrable securities pursuant to the shelf registration statement.

We will be permitted to suspend the use of the prospectus that is part of the shelf registration statement if our Board of Directors determines to do so for valid business reasons, including circumstances relating to pending corporate developments and similar events or public filings with the SEC for a period not to exceed 45 days in any three-month period and not to exceed an aggregate of 120 days in any twelve-month period. We need not specify the nature of the event giving rise to a suspension in any notice of a suspension provided to the holders.

If the registration statement shall cease to be effective or fail to be usable, except as permitted in the preceding paragraph, without being succeeded within seven business days by a post-effective amendment or a report filed with the SEC pursuant to the Exchange Act that cures the failure of the registration statement to be effective or usable or the prospectus has been suspended as described in the preceding paragraph longer than the period permitted by such paragraph, each a registration default, additional interest will accrue on the notes, from and including the day following the registration default to but excluding the day on which the registration default has been cured. Additional interest will be paid semi-annually in arrears, with the interest payment due on the first interest payment date following the date on which such additional interest begin to accrue, and will accrue at an additional rate per year equal to:

- 0.25% of the principal amount of the notes to and including the 90th day following such registration default; and
- 0.50% of the principal amount of the notes from and after the 91st day following such registration default.

In no event will additional interest accrue after the second anniversary of the date of issuance of the notes or at a rate per year exceeding 0.50% of the issue price of the notes. We will have no other liabilities for monetary damages with respect to any registration default. If a holder has converted some or all of its notes into common stock, the holder will not be entitled to receive any additional interest with respect to such common stock or the principal amount of the notes converted.

This summary of the registration rights agreement is not complete. This summary is subject to, and is qualified in its entirety by reference to, all of the provisions of the registration rights agreement.

DESCRIPTION OF CAPITAL STOCK

General

Our authorized capital stock consists of 500,000,000 shares of common stock, par value \$0.01 per share. We do not have any authorized preferred stock.

Common Stock

As of September 29, 2006, there were 31,411,080 shares of common stock outstanding held of record by approximately 1,395 holders. At all elections of our directors, the holders of our common stock are entitled to as many votes as equal the number of shares held multiplied by the number of directors being elected, and may cast all votes for a single candidate or may distribute their votes among any two or more candidates, or cumulative voting. For all other matters to be voted upon by the stockholders, the holders of common stock are entitled to one vote for each share held of record. Holders of common stock may receive ratably any dividends that our board of directors may declare out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to share ratably in all assets remaining after the payment of our liabilities. Holders of common stock have no preemptive rights or rights to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to the common stock.

Common Shares Rights Plan

On December 16, 1988, our board of directors authorized and declared a dividend of one share purchase right for each share of our common stock outstanding as of the close of business on January 6, 1989 and each share of common stock issued thereafter, subject to certain limitations. The First Amended and Restated Common Shares Rights Agreement dated June 24, 1998 provides, among other things, that each stock purchase right entitles the registered holder to purchase one share of our common stock initially at a price of \$80.00. The purchase price of the shares of common stock and number of shares of common stock issuable upon exercise of the rights are subject to adjustment for stock splits, combinations, recapitalizations and reclassifications of our capital stock. Until the right is exercised, the holder of the right will have no rights as a stockholder with regard to the shares of our common stock issuable upon exercise of the rights.

The stock purchase rights will expire December 16, 2008, unless earlier redeemed or exchanged, and will become exercisable and transferable separately from the common stock upon the earlier of:

- ten days following a public announcement that a person or group has acquired or obtained the right to acquire, beneficial ownership of 20% or more of our outstanding common stock; or
- ten business days or such later date as may be determined by a majority of directors commencement of, or announcement of a tender offer or exchange offer, the consummation of which would result in the beneficial ownership by a person or group of 20% or more of our outstanding common stock.

If an acquirer obtains 20% or more of our common stock, then each stock purchase right will, to the extent such stock purchase right is then exercisable, entitle the holder thereof to purchase at the then-current purchase price, a number of shares of our common stock having a value equal to two times the purchase price. If we are acquired in a merger, consolidation or other business transaction or we sell 50% or more of our consolidated assets or earning power, then each stock purchase right will, to the extent such stock purchase right is then exercisable, entitle the holder thereof to purchase at the then-current purchase price, a number of shares of the common stock of the acquiring company having a then-current market value equal to two times the purchase price. Our successor or acquiror is required to assume all of our obligations and duties under the common shares rights plan upon a merger, consolidation or other transaction resulting in our change of control.

The stock purchase rights are redeemable at our option for \$0.001 per stock purchase right at any time on or prior to the earlier of the distribution date or the final expiration date of the stock purchase right; however, if a majority of our board of directors is elected by stockholder action by written consent, then for a period of 180 days following such election the stock purchase right cannot be redeemed if such redemption is reasonable likely to have the purpose or effect of facilitating our acquisition.

In the event that we do not have sufficient shares of our common stock available to exercise all outstanding rights, we may instead substitute cash, assets or other securities for the shares of our common stock which otherwise would have been issuable upon exercise of the rights.

Although the stock purchase rights should not interfere with a business combination approved by our board of directors in the manner set forth in the Common Shares Rights Plan, the rights may cause substantial dilution to a person or group that attempts to acquire control of us without prior approval of our board.

Delaware Anti-Takeover Law and Other Anti-Takeover Provisions

Delaware Law

We are subject to Section 203 of the Delaware General Corporation Law, which regulates acquisitions of Delaware corporations. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock outstanding at the time the transaction commenced excluding for purposes of determining the number of shares outstanding the shares owned by directors and officers and shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or following the date of the transaction, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66% of the outstanding voting stock that is not owned by the interested stockholder.

An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting securities. We expect the existence of this provision to have an anti-takeover effect with respect to transactions that our board of directors do not approve in advance. We also anticipate that Section 203 may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders. A Delaware corporation may opt out of Section 203 with an express provision in its original certificate of incorporation or an express provision in its certification of incorporation or bylaws resulting from amendments approved by the holders of at least a majority of the corporation's outstanding voting shares. We have not opted out of Section 203.

Certificate of Incorporation and Bylaw Provisions

Provisions of our certificate of incorporation and bylaws may have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of us. These provisions are expected to discourage coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of us to first obtain the prior approval of our board of

directors. We believe that the benefits of increased protection of our ability to negotiate with the proponent of an unfriendly or unsolicited acquisition proposal outweigh the disadvantages of discouraging these proposals because, among other things, negotiation will result in an improvement of their terms. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock. These provisions include:

- the ability of our board of directors to alter our bylaws without stockholder approval;
- limiting the ability of our stockholders to call special meetings;
- limiting the ability of our stockholders to act by written consent;
- the ability of our board of directors to fix in advance a record date for the purpose of determining the stockholders entitled to notice of or to vote at any meeting of stockholders and to consent to corporate action in writing; and
- establishing advance notification requirements for nominations for election to our board of directors or for proposing matters that can be acted on by stockholders at a stockholder meeting.

These and other provisions contained in our certificate of incorporation and bylaws could have the effect of delaying or preventing a change in control.

SELLING SECURITYHOLDERS

We originally issued the notes in a private placement in March 2006 to Merrill Lynch, Pierce, Fenner & Smith Incorporated, the initial purchaser. The initial purchaser resold the notes to purchasers in transactions exempt from registration pursuant to Rule 144A. Selling securityholders may offer and sell the notes and the underlying common stock pursuant to a prospectus supplement.

PLAN OF DISTRIBUTION

We will not receive any of the proceeds of the sale of the notes or the common stock issued upon conversion of the notes offered by this prospectus. The notes and the underlying common stock may be sold from time to time to purchasers:

- directly by the selling securityholders or their pledgees, donees, transferees or any successors in interest (all of whom may be selling securityholders); or
- through underwriters, broker-dealers or agents who may receive compensation in the form of discounts, concessions or commissions from the selling securityholders or the purchasers of the notes and underlying common stock.

The selling securityholders and any such broker-dealers or agents who participate in the distribution of the notes and the underlying common stock may be deemed to be underwriters. As a result, any profits on the sale of the notes and the underlying common stock by selling securityholders and any discounts, commissions or concessions received by any such broker-dealers or agents might be deemed to be underwriting discounts and commissions under the Securities Act. If the selling securityholders were to be deemed underwriters, the selling securityholders may be subject to certain statutory liabilities of, including, but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act.

Any selling securityholder who is a broker-dealer may be deemed to be an underwriter within the meaning of Section 2(11) of the Securities Act. These securityholders purchased their notes in the open market, not directly from us, and we are not aware of any underwriting plan or agreement, underwriters or dealers compensation, or passive market-making or stabilization transactions involving the purchase or distribution of these securities by these securityholders. To our knowledge, none of the selling

securityholders who are affiliates of broker-dealers purchased the notes outside of the ordinary course of business or, at the time of the purchase of the notes, had any agreement or understanding, directly or indirectly, with any person to distribute the securities.

If the notes and the underlying common stock are sold through underwriters or broker-dealers, the selling securityholders will be responsible for underwriting discounts or commissions or agent's commissions.

The notes and the underlying common stock may be sold in one or more transactions at:

- fixed prices;
- prevailing market prices at the time of sale;
- varying prices determined at the time of sale; or
- negotiated prices.

These sales may be effected in transactions:

- on any national securities exchange or quotation service on which the notes and underlying common stock may be listed or quoted at the time of the sale;
- in the over-the-counter market; or
- in transactions otherwise than on such exchanges or services or in the over-the-counter market.

These transactions may include block transactions.

In connection with sales of the notes and the underlying common stock, the selling securityholders may enter into hedging transactions with broker-dealers. These broker-dealers may in turn engage in short sales of the notes and the underlying common stock in the course of hedging their positions. The selling securityholders may also sell the notes and the underlying common stock short and deliver notes and the underlying common stock to close out short positions, or loan or pledge notes and the underlying common stock to broker-dealers that in turn may sell the notes and the underlying common stock.

To our knowledge, there are currently no plans, arrangements or understandings between any selling securityholders and any underwriter, broker-dealer or agent regarding the sale of the notes and the underlying common stock by the selling securityholders. Selling securityholders may not sell any or all of the notes and the underlying common stock offered by them pursuant to this prospectus. In addition, we cannot assure you that any such selling securityholder will not transfer, devise or gift the notes and the underlying common stock by other means not described in this prospectus.

Our common stock is quoted on the NASDAQ Global Select Market under the symbol COHR. We do not intend to apply for the listing of the notes on any securities exchange or for quotation through the NASDAQ Global Select Market. The initial purchaser has advised us that it intends to make a market in the notes. However, it is under no obligation to do so and may discontinue any market-making activities at any time without any notice. Accordingly, we cannot assure that the notes will be liquid or that any trading for the notes will develop.

There can be no assurance that any selling securityholder will sell any or all of the notes and the underlying common stock pursuant to this prospectus. In addition, any notes and the underlying common stock covered by this prospectus that qualify for sale pursuant to Rule 144 or Rule 144A of the Securities Act may be sold under Rule 144 or Rule 144A rather than pursuant to this prospectus.

The selling securityholders and any other person participating in such distribution will be subject to the Exchange Act. The Exchange Act rules include, without limitation, Regulation M, which may limit the timing of purchases and sales of any of the notes and the underlying common stock by the selling

securityholders and any other such person. In addition, Regulation M of the Exchange Act may restrict the ability of any person engaged in the distribution of the notes and the underlying common stock to engage in market-making activities with respect to the particular notes and the underlying common stock being distributed for a period of up to five business days prior to the commencement of such distribution. This may affect the marketability of the notes and the underlying common stock and the ability of any person or entity to engage in market-making activities with respect to the notes and the underlying common stock.

Pursuant to the registration rights agreement, we and the selling securityholders will be indemnified by the other against certain liabilities, including certain liabilities under the Securities Act or will be entitled to contribution in connection with these liabilities.

We have agreed to pay substantially all of the expenses incidental to the registration, offering and sale of the notes and the underlying common stock to the public other than commissions, fees and discounts of underwriters, brokers, dealers and agents.

CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS

TO ENSURE COMPLIANCE WITH U.S. TREASURY DEPARTMENT CIRCULAR 230, YOU ARE HEREBY NOTIFIED THAT: (A) ANY DISCUSSION OF U.S. FEDERAL TAX ISSUES IN THIS PROSPECTUS IS NOT INTENDED OR WRITTEN TO BE RELIED UPON, AND CANNOT BE RELIED UPON BY YOU FOR THE PURPOSE OF AVOIDING PENALTIES THAT MAY BE IMPOSED ON YOU UNDER THE INTERNAL REVENUE CODE OF 1986, AS AMENDED (THE CODE); (B) SUCH DISCUSSION IS INCLUDED HEREIN BY COHERENT IN CONNECTION WITH THE PROMOTION OR MARKETING (WITHIN THE MEANING OF CIRCULAR 230) BY COHERENT AND THE INITIAL PURCHASER OF THE TRANSACTIONS OR MATTERS ADDRESSED HEREIN; AND (C) YOU SHOULD SEEK ADVICE BASED ON THEIR PARTICULAR CIRCUMSTANCES FROM AN INDEPENDENT TAX ADVISOR.

This section is a discussion of the material U.S. federal income tax considerations relating to the purchase, ownership and disposition of the notes and the common stock into which the notes may be converted. This summary does not provide a complete analysis of all potential tax considerations. The information provided below is based on existing U.S. federal income tax authorities, all of which are subject to change or differing interpretations, possibly with retroactive effect. There can be no assurances that the Internal Revenue Service (the IRS) will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, a ruling from the IRS with respect to the U.S. federal income tax consequences of purchasing, owning or disposing of the notes or common stock. The summary generally applies only to beneficial owners of the notes that hold the notes and common stock as capital assets (generally, for investment). This discussion does not purport to deal with all aspects of U.S. federal income taxation that may be relevant to a particular beneficial owner in light of the beneficial owner's circumstances (for example, persons subject to the alternative minimum tax provisions of the Code, or a U.S. Holder (as defined below) whose functional currency is not the U.S. dollar). Also, it is not intended to be wholly applicable to all categories of investors, some of which may be subject to special rules (such as dealers in securities or currencies, traders in securities that elect to use a mark-to-market method of accounting, banks, thrifts, regulated investment companies, real estate investment trusts, insurance companies, tax-exempt entities, tax-deferred or other retirement accounts, and persons holding notes or common stock as part of a hedging or conversion transaction or a straddle, or persons deemed to sell notes or common stock under the constructive sale provisions of the Code). Finally, the summary does not describe the effect of the U.S. federal estate and gift tax laws or the effects of any applicable foreign, state or local laws.

INVESTORS CONSIDERING THE PURCHASE OF NOTES SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME

TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE CONSEQUENCES OF U.S. FEDERAL ESTATE OR GIFT TAX LAWS, FOREIGN, STATE AND LOCAL LAWS, AND TAX TREATIES.

U.S. Holders

As used herein, the term *U.S. Holder* means a beneficial owner of the notes or the common stock into which the notes may be converted that, for U.S. federal income tax purposes is (1) an individual who is a citizen or resident of the United States, (2) a corporation, or an entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or any state of the United States, including the District of Columbia, or (3) an estate the income of which is subject to U.S. federal income taxation regardless of its source. A trust is a U.S. Holder if it is (1) subject to the primary supervision of a U.S. court and the control of one or more U.S. persons or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person. The term *U.S. Holder* also includes certain former citizens and residents of the United States. A *Non-U.S. Holder* is a beneficial owner of the notes or the common stock into which the notes may be converted (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that, for U.S. federal income tax purposes, is not a U.S. Holder. If a partnership (including for this purpose any entity or arrangement, domestic or foreign, treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of a note or common stock acquired upon conversion of a note, the tax treatment of a partner in the partnership will depend upon the status of the partner and the activities of the partnership. A beneficial owner of a note or common stock acquired upon conversion of a note that is a partnership, and partners in such partnership, should consult their own tax advisors about the U.S. federal income tax consequences of purchasing, owning and disposing of the notes and the common stock into which the notes may be converted.

Taxation of Interest

U.S. Holders will be required to recognize as ordinary income any interest paid or accrued on the notes, in accordance with their regular method of tax accounting. In general, if the terms of a debt instrument entitle a holder to receive payments (other than fixed periodic interest) that exceed the issue price of the instrument, the holder may be required to recognize additional amounts as *original issue discount* over the term of the instrument, irrespective of the holder's regular method of tax accounting. We believe that the notes will not be issued with original issue discount for U.S. federal income tax purposes.

We may be required to make payments of additional interest to holders of the notes if we do not file, or cause to be declared or keep effective, a registration statement, as described under *Description of the Notes Registration Rights* above. We believe that there is only a remote possibility that we would be required to pay additional interest, or that if such additional interest were required to be paid, it would be an incidental amount, and therefore we do not intend to treat the notes as subject to the special rules governing certain contingent payment debt instruments (which, if applicable, would affect the timing, amount and character of income with respect to a note). Our determination in this regard, while not binding on the IRS, is binding on U.S. Holders unless they disclose their contrary position. If, contrary to expectations, we pay additional interest, although it is not free from doubt, such additional interest should be taxable to a U.S. Holder as ordinary interest income at the time it accrues or is paid in accordance with the U.S. Holder's regular method of tax accounting. In the event we pay additional interest on the notes, U.S. Holders should consult their own tax advisors regarding the treatment of such amounts.

Market Discount

If a U.S. Holder acquires a note other than in connection with its original issue at a price that is less than its issue price, the amount of such difference is treated as market discount for U.S. federal income tax purposes, unless such difference is less than $\frac{1}{4}$ of one percent of the principal amount at maturity multiplied by the number of complete years to maturity from the date of acquisition. Under the market discount rules, a U.S. Holder is required to treat any gain on the sale, exchange, retirement or other disposition of a note as ordinary income to the extent of the accrued market discount that has not previously been included in income. If a U.S. Holder disposes of a note that has accrued market discount in certain nonrecognition transactions in which the U.S. Holder receives property the basis of which is determined in whole or in part by reference to the basis of the note, the accrued market discount generally is includible in income at the time of such transaction only to the extent of the gain recognized. To the extent not included in income at the time of the nonrecognition transaction, the accrued market discount attaches to the property received and is recognized as ordinary income upon the disposition of such property. In general, the amount of market discount that has accrued is determined on a ratable basis, by allocating an equal amount of market discount to each day of every accrual period. A U.S. Holder may elect, however, to determine the amount of accrued market discount allocable to any accrual period under the constant yield method. Any such election applies on a note-by-note basis and is irrevocable. A U.S. Holder also may elect to include market discount in income currently as it accrues. Any such election applies to all debt instruments acquired by the U.S. Holder on or after the first day of the first taxable year to which the election applies, and is irrevocable without the consent of the IRS. If such an election is made, the U.S. Holder's tax basis in the notes will be increased by the amount of market discount included in income. Unless a U.S. Holder elects to include market discount in income as it accrues, such U.S. Holder may not be allowed to deduct on a current basis a portion of the interest expense on any indebtedness incurred or continued to purchase or carry notes with market discount.

Amortizable Bond Premium

If a U.S. Holder purchases a note at a price that exceeds the principal amount of the note, the amount of such excess is referred to as bond premium for U.S. federal income tax purposes. The U.S. Holder may elect to amortize the bond premium against interest payable on the note, except to the extent that the bond premium is attributable to the conversion feature of the note. In addition, any bond premium in excess of the interest payable on the note may be deductible over the term of the note. If a U.S. Holder elects to amortize bond premium, the amount of bond premium allocable to each period will be based on a constant yield to maturity over the period the note is held. The amortized bond premium would reduce the U.S. Holder's tax basis in the note. Any such election applies to all fully taxable bonds held by the U.S. Holder at the beginning of the first taxable year to which the election applies, and all fully taxable bonds acquired thereafter, and is irrevocable without the consent of the IRS. If the election is not made, a U.S. Holder must include the full amount of each interest payment in income as it accrues or is paid, and premium will not be taken into account until principal payments are received on the note or the note is sold or otherwise disposed of.

Sale, Exchange, Redemption or Other Disposition of Notes

A U.S. Holder generally will recognize capital gain or loss if the holder disposes of a note in a sale, exchange, redemption or other taxable disposition (other than conversion of a note into cash and shares of our common stock, the U.S. federal income tax consequences of which are described under U.S. Holders Conversion of Notes below). The U.S. Holder's gain or loss will equal the difference between the proceeds received by the holder (other than amounts attributable to accrued but unpaid interest) and the holder's adjusted tax basis in the note. The U.S. Holder's adjusted tax basis in the note will generally equal the amount the holder paid for the note (increased by the amount of the market discount, if any, previously included in income, and decreased by the amount of amortized bond premium, if any). The portion of any proceeds that is attributable to accrued interest will not be taken into account in computing the U.S. Holder's capital gain or loss. Instead, that portion will be recognized as ordinary interest income to the extent that the U.S. Holder has not previously included the accrued interest in income. The gain or loss recognized by the U.S. Holder on the disposition of the note will be long-term capital gain or loss if the holder held the note for more than one year, or short-term capital gain or loss if the holder held the note for one year or less, at the time of the transaction. Long-term capital gains of non-corporate taxpayers currently are taxed at a maximum 15% federal rate (effective for tax years through 2008, after which the maximum rate is scheduled to increase to 20%). Short-term capital gains are taxed at ordinary income rates. The deductibility of capital losses is subject to limitations. If a U.S. Holder's capital loss recognized from the sale, exchange, redemption or other taxable disposition of the notes exceeds certain thresholds, which are generally \$10 million for corporate U.S. Holders, other than S corporations, and \$2 million for other U.S. Holders, the U.S. Holder may be required to file a disclosure statement with the IRS.

Conversion of Notes

Upon conversion of a note solely into cash, a U.S. Holder generally will be subject to the rules described under U.S. Holders Sale, Exchange, Redemption or Other Disposition of Notes above.

The tax consequences of the conversion of a note into cash and shares of our common stock are not entirely clear. A U.S. Holder may be treated as exchanging the note for our common stock and cash in a recapitalization for U.S. federal income tax purposes. In such case, the U.S. Holder would not be permitted to recognize loss, but would be required to recognize gain. The amount of gain recognized by a U.S. Holder would equal the lesser of (i) the excess (if any) of (A) the amount of cash received (excluding any cash received in lieu of a fractional share of our common stock and any cash received attributable to accrued and unpaid interest) plus the fair market value of our common stock received (treating a fractional share of our common stock as issued and received for this purpose and excluding any such common stock that is attributable to accrued and unpaid interest) upon conversion over (B) the U.S. Holder's tax basis in the converted note, and (ii) the amount of cash received upon conversion (other than any cash received in lieu of a fractional share of our common stock and any cash received attributable to accrued and unpaid interest). Subject to the discussion under U.S. Holders Constructive Distributions below regarding the possibility that the adjustment to the conversion rate of a note converted in connection with a fundamental change may be treated as a taxable stock dividend, the gain recognized by a U.S. Holder upon conversion of a note will be long-term capital gain if the holder held the note for more than one year, or short-term capital gain if the holder held the note for one year or less, at the time of the conversion. Long-term capital gains of non-corporate taxpayers currently are taxed at a maximum 15% federal rate (effective for tax years through 2008, after which the maximum rate is scheduled to increase to 20%). Short-term capital gains are taxed at ordinary income rates. The U.S. Holder's tax basis in the common stock received (including any fractional share for which cash is paid, but excluding shares attributable to accrued and unpaid interest) generally would equal the tax basis of the converted note, decreased by the amount of cash received (other than cash in lieu of a fractional share of common stock and any cash attributable to

accrued and unpaid interest), and increased by the amount of gain (if any) recognized upon conversion (other than any gain recognized as a result of cash received in lieu of a fractional share of common stock). The U.S. Holder's holding period in the common stock (other than shares attributable to accrued and unpaid interest) would include the holding period in the converted note.

Alternatively, the conversion of a note into cash and shares of our common stock may be treated as in part a payment in redemption for cash of a portion of the note and in part a conversion of a portion of the note into common stock. In such case, a U.S. Holder's aggregate tax basis in the note would be allocated between the portion of the note treated as redeemed and the portion of the note treated as converted into common stock on a pro rata basis. The U.S. Holder generally would recognize capital gain or loss with respect to the portion of the note treated as redeemed equal to the difference between the amount of cash received by the U.S. Holder (other than amounts attributable to accrued and unpaid interest) and the U.S. Holder's tax basis in the portion of the note treated as redeemed. See U.S. Holders' Sale, Exchange, Redemption or Other Disposition of Notes above.

With respect to the portion of the note treated as converted, a U.S. Holder generally would not recognize any gain or loss (except with respect to cash received in lieu of a fractional share of common stock and cash received attributable to accrued and unpaid interest), subject to the discussion under U.S. Holders' Constructive Distributions below regarding the possibility that the adjustment to the conversion rate of a note converted in connection with a fundamental change may be treated as a taxable stock dividend. The tax basis allocated to the portion of the note treated as converted into common stock would be the U.S. Holder's tax basis in the common stock (including any fractional share for which cash is paid, but excluding shares attributable to accrued interest). The U.S. Holder's holding period in the common stock (other than shares attributable to accrued interest) would include the holding period in the converted note.

With respect to cash received in lieu of a fractional share of our common stock, a U.S. Holder would be treated as if the fractional share were issued and received and then immediately redeemed for cash. Accordingly, the U.S. Holder generally would recognize gain or loss equal to the difference between the cash received and that portion of the holder's tax basis in the common stock (determined as discussed above) attributable to the fractional share.

Any cash and the value of any portion of our common stock that is attributable to accrued and unpaid interest on the notes not yet included in income by a U.S. Holder would be taxed as ordinary income. The basis in any shares of common stock attributable to accrued and unpaid interest would equal the fair market value of such shares when received. The holding period in any shares of common stock attributable to accrued and unpaid interest would begin on the day after the date of conversion.

A U.S. Holder that converts a note between a record date for an interest payment and the next interest payment date and consequently receives a payment of cash interest, as described in Description of the Notes Conversion Procedures, should consult its own tax advisor concerning the appropriate treatment of such payments.

U.S. Holders are urged to consult their own tax advisors with respect to the U.S. federal income tax consequences of converting their notes into cash or a combination of cash and our common stock.

In the event that we undergo a business combination as described under Description of Notes Conversion Rights Conversion Procedures, the conversion obligation may be adjusted so that holders would be entitled to convert the notes into the type of consideration that they would have been entitled to receive upon such business combination had the notes been converted into our common stock immediately prior to such business combination, except that such holders will not be entitled to receive a make whole premium unless such notes are converted in connection with the relevant fundamental change. Depending on the facts and circumstances at the time of such business combination, such adjustment may result in a

deemed exchange of the outstanding debentures, which may be a taxable event for U.S. federal income tax purposes.

U.S. Holders are urged to consult their own tax advisors regarding the U.S. federal income tax consequences of such an adjustment upon a business combination.

Distributions

If, after a U.S. Holder acquires our common stock upon a conversion of a note, we make a distribution in respect of such common stock from our current or accumulated earnings and profits as determined under U.S. federal income tax principles, the distribution will be treated as a dividend and will be includible in a U.S. Holder's income when paid. If the distribution exceeds our current and accumulated earnings and profits, the excess will be treated first as a tax-free return of the U.S. Holder's investment, up to the U.S. Holder's tax basis in its common stock, and any remaining excess will be treated as capital gain from the sale or exchange of the common stock. If the U.S. Holder is a U.S. corporation, it would generally be able to claim a dividend received deduction on a portion of any distribution taxed as a dividend, provided that certain holding period requirements are satisfied. Subject to certain exceptions, dividends received by non-corporate U.S. Holders currently are taxed at a maximum rate of 15% (effective for tax years through 2008), provided that certain holding period requirements are met.

Constructive Distributions

The terms of the notes allow for changes in the conversion rate of the notes under certain circumstances. A change in conversion rate that allows noteholders to receive more shares of common stock on conversion may increase the noteholders' proportionate interests in our earnings and profits or assets. In that case, the noteholders may be treated as though they received a taxable distribution in the form of our common stock. A taxable constructive stock distribution would result, for example, if the conversion rate is adjusted to compensate noteholders for distributions of cash or property to our stockholders. The adjustment to the conversion rate of notes converted in connection with a change in control, as described under Description of Notes Conversion Rights Make Whole Premium Upon a Fundamental Change above, also may be treated as a taxable stock distribution. Not all changes in the conversion rate that result in noteholders' receiving more common stock on conversion, however, increase the noteholders' proportionate interests in us. For instance, a change in conversion rate could simply prevent the dilution of the noteholders' interests upon a stock split or other change in capital structure. Changes of this type, if made pursuant to bona fide reasonable adjustment formula, are not treated as constructive stock distributions. Conversely, if an event occurs that dilutes the noteholders' interests and the conversion rate is not adjusted, the resulting increase in the proportionate interests of our stockholders could be treated as a taxable stock distribution to the stockholders. Any taxable constructive stock distributions resulting from a change to, or failure to change, the conversion rate that is treated as a distribution of common stock would be treated for U.S. federal income tax purposes in the same manner as distributions on our common stock paid in cash or other property. They would result in a taxable dividend to the recipient to the extent of our current or accumulated earnings and profits (with the recipient's tax basis in its note or common stock (as the case may be) being increased by the amount of such dividend), with any excess treated as a tax-free return of the holder's investment in its note or common stock (as the case may be) or as capital gain. U.S. Holders should consult their own tax advisors regarding whether any taxable constructive stock dividend would be eligible for the maximum 15% rate or the dividends received deduction described in the previous paragraph as the requisite applicable holding period requirements might not be considered to be satisfied.

Sale or Exchange of Common Stock

A U.S. Holder generally will recognize capital gain or loss on a sale or exchange of common stock. The U.S. Holder's gain or loss will equal the difference between the proceeds received by the holder and the holder's tax basis in the stock. The proceeds received by the U.S. Holder will include the amount of any cash and the fair market value of any other property received for the stock. The gain or loss recognized by a U.S. Holder on a sale or exchange of common stock will be long-term capital gain or loss if the holder's holding period in the common stock is more than one year, or short-term capital gain or loss if the holder's holding period in the common stock is one year or less, at the time of the transaction. Long-term capital gains of non-corporate taxpayers are currently taxed at a maximum 15% federal rate (effective for tax years through 2008, after which the maximum rate is scheduled to increase to 20%). Short-term capital gains are taxed at ordinary income rates. The deductibility of capital losses is subject to limitations. If U.S. Holder's capital loss recognized from the sale or exchange of common stock exceeds certain thresholds, which are generally \$10 million for corporate U.S. Holders, other than S corporations, and \$2 million for other U.S. Holders, the U.S. Holders may be required to file a disclosure statement with the IRS.

Non-U.S. Holders

The following discussion is limited to the U.S. federal income tax consequences relevant to a Non-U.S. Holder (as defined above).

Taxation of Interest

Payments of interest to nonresident persons or entities are generally subject to U.S. federal income tax at a rate of 30% (or a reduced or zero rate under the terms of an applicable income tax treaty between the United States and the Non-U.S. Holder's country of residence), collected by means of withholding by the payor. Payments of interest on the notes to most Non-U.S. Holders, however, will qualify as portfolio interest, and thus will be exempt from U.S. federal income tax, including withholding of such tax, if the Non-U.S. Holders certify their nonresident status as described below. The portfolio interest exception will not apply to payments of interest to a Non-U.S. Holder that:

- owns, actually or constructively, shares of our stock representing at least 10% of the total combined voting power of all classes of our stock entitled to vote;
- is a bank that acquired the notes in consideration for an extension of credit made pursuant to a loan agreement entered into in the ordinary course of business;
- is a controlled foreign corporation that is related, directly or indirectly, to us through sufficient stock ownership; or
- is engaged in the conduct of a trade or business in the United States to which such interest payments are effectively connected (see the discussion under Non-U.S. Holders Income or Gains Effectively Connected with a U.S. Trade or Business below).

In general, a foreign corporation is a controlled foreign corporation if more than 50% of its stock is owned, actually or constructively, by one or more U.S. persons that each owns, actually or constructively, at least 10% of the corporation's voting stock.

The portfolio interest exception, entitlement to treaty benefits and several of the special rules for Non-U.S. Holders described below apply only if the holder certifies its nonresident status. A Non-U.S. Holder can meet this certification requirement by providing a properly executed IRS Form W-8BEN or appropriate substitute form to us or our paying agent prior to the payment. If the Non-U.S. Holder holds the note through a financial institution or other agent acting on the holder's behalf, the holder will be

required to provide appropriate documentation to the agent. The Non-U.S. Holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries.

Additional Interest

Absent further relevant guidance from the IRS, we may treat payments of additional interest, if any, to Non-U.S. Holders as described above under "Description of Notes Registration Rights" as subject to U.S. federal withholding tax. Therefore, we may withhold on such payments at a rate of 30% unless we timely receive a properly executed IRS Form W-8BEN or W-8ECI from the Non-U.S. Holder claiming that such payments are subject to reduction or elimination of withholding under an applicable treaty or are effectively connected with the Non-U.S. Holder's conduct of a U.S. trade or business. If we withhold tax from any payment of additional interest made to a Non-U.S. Holder and such payment were determined not to be subject to U.S. federal income tax, a Non-U.S. Holder generally would be entitled to a refund of any tax withheld by timely filing an appropriate claim for refund with the IRS.

Sale, Exchange, Redemption, Conversion or Other Disposition of Notes

Non-U.S. Holders generally will not be subject to U.S. federal income or withholding tax on any gain realized on the sale, exchange, redemption, conversion or other disposition of notes (other than with respect to payments attributable to accrued interest, which will be taxed as described under "Non-U.S. Holders Taxation of Interest" above), unless:

- the gain is effectively connected with the conduct by the Non-U.S. Holder of a U.S. trade or business (and, generally, if an income tax treaty applies, the gain is attributable to a U.S. permanent establishment maintained by the Non-U.S. Holder), in which case the gain would be subject to tax as described below under "Non-U.S. Holders Income or Gains Effectively Connected with a U.S. Trade or Business";
- the Non-U.S. Holder was a citizen or resident of the United States and is subject to certain special rules that apply to expatriates;
- subject to certain exceptions, the Non-U.S. Holder is an individual who is present in the United States for 183 days or more in the year of disposition, in which case, except as otherwise provided by an applicable income tax treaty, the gain, which may be offset by U.S. source capital losses, would be subject to a flat 30% tax, even though the individual is not considered a resident of the United States; or
- the rules of the Foreign Investment in Real Property Tax Act (or FIRPTA) (described below) treat the gain as effectively connected with a U.S. trade or business.

The FIRPTA rules may apply to a sale, exchange, redemption or other disposition of notes by a Non-U.S. Holder if we currently are, or were at any time within five years (or, if shorter, the Non-U.S. Holder's holding period for the notes disposed of) before the transaction, a U.S. real property holding corporation (or USRPHC). In very general terms, we would be a USRPHC if interests in U.S. real estate comprised at least 50% of our assets. We believe that we currently are not, and will not become in the future, a USRPHC.

Dividends

Dividends paid to a Non-U.S. Holder on common stock received on conversion of a note, including any taxable constructive stock dividends resulting from certain adjustments, or failure to make adjustments, to the number of shares of common stock to be issued on conversion (as described under "U.S. Holders Constructive Distributions" above) generally will be subject to U.S. withholding tax at a 30% rate. Withholding tax applicable to any taxable constructive stock dividends received by a Non-U.S. Holder may be

withheld from interest on the notes, distributions on the common stock, shares of common stock or proceeds subsequently paid or credited to the Non-U.S. Holder. The withholding tax on dividends (including any taxable constructive stock dividends), however, may be reduced under the terms of an applicable income tax treaty between the United States and the Non-U.S. Holder's country of residence. A Non-U.S. Holder should demonstrate its entitlement to treaty benefits by timely delivering a properly executed IRS Form W-8BEN or appropriate substitute form. A Non-U.S. Holder that is eligible for a reduced rate of withholding under the terms of an applicable income tax treaty may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Dividends on the common stock that are effectively connected with a Non-U.S. Holder's conduct of a U.S. trade or business are discussed below under **Non-U.S. Holders' Income or Gains Effectively Connected with a U.S. Trade or Business**.

Sale of Common Stock

Non-U.S. Holders generally will not be subject to U.S. federal income or withholding tax on any gains realized on the sale or exchange of common stock, unless the exceptions described under **Non-U.S. Holders' Sale, Exchange, Redemption, Conversion or Other Disposition of Notes** above apply.

Income or Gains Effectively Connected With a U.S. Trade or Business

The preceding discussion of the U.S. federal income and withholding tax considerations of the purchase, ownership or disposition of notes or common stock by a Non-U.S. Holder assumes that the holder is not engaged in a U.S. trade or business. If any interest on the notes, dividends on common stock, or gain from the sale, exchange, redemption, conversion or other disposition of the notes or common stock is effectively connected with a U.S. trade or business conducted by the Non-U.S. Holder, then the income or gain will be subject to U.S. federal income tax on a net income basis at the regular graduated rates and in the same manner applicable to U.S. Holders. If the Non-U.S. Holder is eligible for the benefits of a tax treaty between the United States and the holder's country of residence, any effectively connected income or gain generally will be subject to U.S. federal income tax only if it is also attributable to a permanent establishment or fixed base maintained by the holder in the United States. Payments of interest or dividends that are effectively connected with a U.S. trade or business (and, if a tax treaty applies, attributable to a permanent establishment or fixed base), and therefore included in the gross income of a Non-U.S. Holder, will not be subject to the 30% withholding tax provided that the holder claims exemption from withholding. To claim exemption from withholding, the holder must certify its qualification, which can be done by timely filing a properly executed IRS Form W-8ECI or appropriate substitute form. If the Non-U.S. Holder is a corporation, that portion of its earnings and profits that is effectively connected with its U.S. trade or business generally also would be subject to a branch profits tax. The branch profits tax rate is generally 30%, although an applicable income tax treaty might provide for a lower rate.

Backup Withholding and Information Reporting

The Code and the Treasury regulations require those who make specified payments to report the payments to the IRS. Among the specified payments are interest, dividends, and proceeds paid by brokers to their customers. The required information returns enable the IRS to determine whether the recipient properly included the payments in income. This reporting regime is reinforced by backup withholding rules. These rules require the payers to withhold tax from payments subject to information reporting if the recipient fails to cooperate with the reporting regime by failing to provide his taxpayer identification number to the payor, furnishing an incorrect identification number, or repeatedly failing to report interest or dividends on his returns. The backup withholding tax rate is currently 28%.

Payments of interest or dividends to U.S. Holders of notes or common stock generally will be subject to information reporting, and will be subject to backup withholding, unless the holder (1) is an exempt payee, such as a corporation, or (2) provides the payor with a correct taxpayer identification number and

complies with applicable certification requirements. Payments made to U.S. Holders by a broker upon a sale of notes or common stock will generally be subject to information reporting and backup withholding. If the sale is made through a foreign office of a foreign broker, however, the sale will generally not be subject to either information reporting or backup withholding. This exception may not apply if the foreign broker is owned or controlled by U.S. persons, or is engaged in a U.S. trade or business.

We must report annually to the IRS the interest and/or dividends paid to each Non-U.S. Holder and the tax withheld, if any, with respect to such interest and/or dividends, including any tax withheld pursuant to the rules described under Non-U.S. Holders Taxation of Interest and Non-U.S. Holders Dividends above. Copies of these reports may be made available to tax authorities in the country where the Non-U.S. Holder resides. Payments to Non-U.S. Holders of dividends on our common stock or interest on the notes may be subject to backup withholding unless the Non-U.S. Holder certifies its non-U.S. status on a properly executed IRS Form W-8BEN or appropriate substitute form. Payments made to Non-U.S. Holders by a broker upon a sale of the notes or our common stock will not be subject to information reporting or backup withholding as long as the Non-U.S. Holder certifies its non-U.S. status or otherwise establishes an exemption.

Any amounts withheld from a payment to a U.S. Holder or Non-U.S. Holder of notes or common stock under the backup withholding rules can be credited against any U.S. federal income tax liability of the holder, provided the required information is timely furnished to the IRS.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California.

EXPERTS

The consolidated balance sheets of Coherent, Inc. and subsidiaries as of September 30, 2005 and 2004 and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended September 30, 2005 and management's report on the effectiveness of internal control over financial reporting as of September 30, 2005 included in Coherent, Inc.'s Annual Report on Form 10-K/A for the fiscal year ended October 1, 2005 and incorporated by reference herein, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports which are incorporated herein by reference, and are incorporated by reference in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing. Deloitte & Touche LLP did not audit the consolidated financial statements of Lambda Physik AG (a majority-owned subsidiary of Coherent, Inc.) and subsidiaries for the year ended September 30, 2003, which statements reflect total revenues constituting 20 percent of consolidated total revenues for the year ended September 30, 2003.

The consolidated balance sheet of Lambda Physik AG (a subsidiary of Coherent, Inc.) as of September 30, 2003 (new basis) and the related consolidated statements of operations, cash flows and changes in stockholders' equity for the new basis period from July 27, 2003 to September 30, 2003 and the old basis period from October 1, 2002 to July 26, 2003 (neither included or incorporated by reference herein) have been audited by Ernst & Young AG, independent auditors, as set forth in their report thereon. Ernst & Young AG's report is included in Coherent, Inc.'s Annual Report on Form 10-K/A for the fiscal year ended October 1, 2005 and is incorporated by reference herein. Ernst & Young AG is no longer the independent auditors of Lambda Physik AG, nor have they ever been the independent registered public accounting firm of Coherent, Inc.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information and reporting requirements of the Securities Exchange Act of 1934, or the Exchange Act, under which we file periodic reports, proxy and information statements and other information with the SEC. Copies of the reports, proxy and information statements and other information may be inspected and copies may be made at prescribed rates at the public reference facilities maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information about the public reference facilities. The SEC also maintains a website that contains reports, proxy and information statements and other information, including electronic versions of our filings. The website address is <http://www.sec.gov>.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

This prospectus incorporates by reference some of the reports, proxy and information statements and other information that we have filed with the SEC under the Exchange Act. This means that we are disclosing important business and financial information to you by referring you to those documents. The information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below that we have previously filed with the SEC (other than any portions of such documents that are not deemed filed under the Exchange Act in accordance with the Exchange Act and applicable SEC rules) and any future filings (other than any portions of such documents that are not deemed filed under the Exchange Act in accordance with the Exchange Act and applicable SEC rules) made with the SEC under sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until all of the securities offered by this prospectus sold:

1. our Annual Report on Form 10-K for the fiscal year ended October 1, 2005, as amended by our Annual Report on Form 10-K/A;
2. our Quarterly Report on Form 10-Q for the fiscal quarters ended December 31, 2005, April 1, 2006 and July 1, 2006;
3. our Current Reports on Form 8-K filed on January 11, 2006 (as amended by our Current Report on Form 8-K/A filed on January 23, 2006), February 21, 2006, March 3, 2006, March 13, 2006, March 28, 2006, April 5, 2006, April 26, 2006, June 13, 2006 (as amended by our Current Report on Form 8-K/A filed on June 13, 2006), July 12, 2006 and September 18, 2006;
4. the description of our common stock contained in our registration statement on Form 8-A, including any amendments filed for the purpose of updating that description; and
5. the description of the common stock purchase rights for our common stock contained in our registration statement on Form 8-A/A filed with the SEC on July 1, 1998.

Any statements made in a document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement in this prospectus or in any other subsequently filed document, which is also incorporated by reference, modifies or supersedes the statement. Any statement made in this prospectus is deemed to be modified or superseded to the extent as statement in any subsequently filed document, which is incorporated by reference into this prospectus, modifies or supersedes such statement.

You may request a free copy of any and all of the information incorporated by reference herein that we file with the SEC by written or oral request at Coherent, Inc., 5100 Patrick Henry Drive, Santa Clara, California 95054, Attention: Investor Relations, telephone (408) 764-4000. You may also access our reports and documents via the world wide web at <http://www.cohr.com>.