

INVITROGEN CORP
Form S-4/A
September 10, 2008
Table of Contents

As filed with the Securities and Exchange Commission on September 10, 2008

Registration No. 333-152741

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

Amendment No. 1 to FORM S-4 REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

Invitrogen Corporation

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2836
(Primary Standard Industrial
Classification Code Number)

33-0373077
(I.R.S. Employer
Identification No.)

Invitrogen Corporation

Edgar Filing: INVITROGEN CORP - Form S-4/A

5791 Van Allen Way

Carlsbad, California 92008

Telephone: (760) 603-7200

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

John A. Cottingham, Esq.

Senior Vice President, General Counsel and Secretary

Invitrogen Corporation

5791 Van Allen Way

Carlsbad, California 92008

Telephone: (760) 603-7200

(Name, address, including zip code, and telephone number, including area code, of agent for service)

COPIES TO:

| | | |
|-----------------------------|---|--|
| Jonathan Klein, Esq. | William B. Sawch, Esq. | Robert B. Pincus, Esq. |
| Steven L. Wasserman, Esq. | Senior Vice President and General Counsel | Steven J. Daniels, Esq. |
| DLA Piper LLP (US) | Applied Biosystems Inc. | Skadden, Arps, Slate, Meagher & Flom LLP |
| 1251 Avenue of the Americas | 301 Merritt 7 | One Rodney Square, 7th Floor |
| New York, New York 10020 | Norwalk, Connecticut 06851 | Wilmington, Delaware 19801 |
| Telephone: (212) 335-4500 | Telephone: (203) 840-2900 | Telephone: (302) 651-3000 |
| Facsimile: (212) 335-4501 | Facsimile: (203) 840-2902 | Facsimile: (302) 651-3001 |

Approximate date of commencement of proposed sale to the public: As promptly as practicable after this Registration Statement becomes effective and upon consummation of the transactions described herein.

If the securities being registered on this form are to be offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. "

Edgar Filing: INVITROGEN CORP - Form S-4/A

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

The information in this joint proxy statement/prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary joint proxy statement/prospectus is not an offer to sell these securities and we are not soliciting any offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

DATED SEPTEMBER 10, 2008

PRELIMINARY JOINT PROXY STATEMENT/PROSPECTUS

PROPOSED MERGER YOUR VOTE IS VERY IMPORTANT

Dear Invitrogen and Applied Biosystems Stockholders:

The boards of directors of Invitrogen Corporation and Applied Biosystems Inc. have approved a merger in which the businesses of Invitrogen and Applied Biosystems will be combined. We are sending this joint proxy statement/prospectus to you to ask you to vote in favor of this merger and other matters.

If the merger is completed, Applied Biosystems stockholders will have the right to receive \$17.10 in cash and 0.4543 shares of common stock of Invitrogen for each share of Applied Biosystems stock held. Applied Biosystems stockholders also will have the option to elect to receive either all cash or all Invitrogen shares, subject to proration. If all or part of an Applied Biosystems stockholder's consideration is in the form of shares of Invitrogen common stock and the arithmetic average of the volume-weighted average price of Invitrogen common stock during the 20 consecutive trading days immediately preceding the third business day before the effective time of the merger is between \$43.69 per share and \$46.00 per share, such Applied Biosystems stockholder will also receive an additional cash payment. Based on the number of shares of common stock of Invitrogen and Applied Biosystems outstanding on June 11, 2008, the last trading day prior to the public announcement of the merger, Applied Biosystems stockholders will own approximately 45%, on a fully diluted basis, of the common stock of Invitrogen upon consummation of the merger.

Invitrogen common stock is listed on the NASDAQ Global Select Market under the symbol IVGN.

Applied Biosystems common stock is listed on the New York Stock Exchange under the symbol ABI.

Your vote is very important. We cannot complete the merger unless (1) the Invitrogen common stockholders vote to (a) approve the issuance of Invitrogen common stock in the merger and (b) amend Invitrogen's restated certificate of incorporation to increase the number of authorized shares of common stock and (2) Applied Biosystems stockholders vote to approve and adopt the merger agreement and approve the merger.

Invitrogen and Applied Biosystems each will hold a special meeting of stockholders to vote on proposals related to the merger. The special meetings of stockholders will be held at the dates, times and locations set forth below. Whether or not you plan to attend your company's meeting, please take the time to submit your proxy by completing and mailing the enclosed proxy card. If your shares of Invitrogen common stock or Applied Biosystems stock are held in an account with a bank, broker or other nominee, you must instruct your bank, broker or other nominee how to vote those shares.

For Invitrogen stockholders:

October 16, 2008 at 9:00 am, Pacific time at Invitrogen's headquarters located at 5781 Van Allen Way, Carlsbad, California 92008

The board of directors of Invitrogen recommends that Invitrogen stockholders vote FOR the issuance of Invitrogen common stock in the merger, FOR the amendment to the

For Applied Biosystems stockholders:

October 16, 2008, at 9:30 a.m., Eastern time at Applied Biosystems' headquarters, located at 301 Merritt 7, Main Avenue (old U.S. Route 7), Norwalk, Connecticut, 06851

The board of directors of Applied Biosystems recommends that Applied Biosystems stockholders vote FOR the approval and adoption of the merger agreement

Edgar Filing: INVITROGEN CORP - Form S-4/A

Invitrogen restated certificate of incorporation, and FOR any adjournment of the Invitrogen special meeting of stockholders, if necessary, to solicit additional proxies.

and approval of the merger and FOR any adjournment of the Applied Biosystems special meeting of stockholders, if necessary, to solicit additional proxies.

This document is a prospectus relating to the shares of Invitrogen common stock to be issued pursuant to the merger and a joint proxy statement for the boards of directors of Invitrogen and Applied Biosystems to solicit proxies for their respective special meetings of stockholders. It contains answers to frequently asked questions and a summary of the important terms of the merger, the merger agreement and other related matters, followed by a more detailed discussion.

For a discussion of certain risk factors you should consider before voting on the proposed transaction, see Risk Factors.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved the Invitrogen common stock to be issued pursuant to the merger or passed upon the adequacy or accuracy of this joint proxy statement/prospectus. Any representation to the contrary is a criminal offense.

This joint proxy statement/prospectus is dated _____, 2008 and is first being mailed to stockholders of Invitrogen and Applied Biosystems on or about _____, 2008.

Table of Contents

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

TO BE HELD OCTOBER 16, 2008

To Invitrogen Stockholders:

NOTICE IS HEREBY GIVEN that the special meeting of Invitrogen stockholders will be held on October 16, 2008 at 9:00 am, Pacific Time, at Invitrogen's headquarters, located at 5781 Van Allen Way, Carlsbad, California 92008, for the following purposes:

1) to consider and vote upon a proposal for the Invitrogen stockholders to approve the issuance of Invitrogen common stock to the stockholders of Applied Biosystems Inc. (formerly known as Applera Corporation), or ABI, in the merger of ABI with and into Atom Acquisition, LLC, or Atom Acquisition, a direct wholly-owned subsidiary of Invitrogen, as contemplated by the Agreement and Plan of Merger, dated as of June 11, 2008, as amended by Amendment No. 1 thereto, dated as of September 9, 2008, by and among Invitrogen, Atom Acquisition and ABI, as such agreement may be amended from time to time;

2) to consider and vote upon a proposed amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized shares of common stock from 200,000,000 to 400,000,000; and

3) to consider and vote upon any adjournments of the Invitrogen special meeting of stockholders, if necessary, to solicit additional proxies in favor of any or all of the foregoing proposals.

Only stockholders of record at the close of business on September 5, 2008 are entitled to notice of and to vote at the Invitrogen special meeting of stockholders or at any adjournments or postponements thereof. Each share of Invitrogen common stock is entitled to one vote at the Invitrogen special meeting of stockholders. A complete list of stockholders entitled to vote at the Invitrogen special meeting of stockholders will be available for examination at Invitrogen's offices in Carlsbad, California, during normal business hours by any holder of Invitrogen common stock for any purpose relevant to the Invitrogen special meeting of stockholders for a period of ten days prior to the special meeting. This list will also be available at the Invitrogen special meeting of stockholders, and any Invitrogen stockholder may inspect it for any purpose relevant to the special meeting.

The board of directors of Invitrogen has unanimously approved and adopted the Agreement and Plan of Merger and the transactions contemplated by it, declared its advisability, determined that the Agreement and Plan of Merger and the transactions contemplated by it are fair to, and in the best interests of, Invitrogen and its stockholders, and unanimously recommends that Invitrogen stockholders vote at the Invitrogen special meeting of stockholders to approve the issuance of Invitrogen common stock pursuant to the Agreement and Plan of Merger, the adoption of the proposed amendment to Invitrogen's restated certificate of incorporation, and any adjournments of the Invitrogen special meeting of stockholders, if necessary, to solicit additional proxies.

By Order of the Board of Directors,
John A. Cottingham
Senior Vice President, General Counsel & Secretary
Carlsbad, California

September 10, 2008

Table of Contents

YOUR VOTE IS IMPORTANT

Even if you plan to attend the Invitrogen special meeting of stockholders in person, we request that you completely sign, date and return the enclosed proxy or voting instruction card in the postage-paid envelope provided, using the procedures in the voting instructions provided to you, and thus ensure that your shares will be represented at the Invitrogen special meeting of stockholders if you are unable to attend. No postage is required if mailed in the United States. If you do attend the Invitrogen special meeting of stockholders and wish to vote in person, you may revoke your proxy by voting your shares in person.

Table of Contents

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

TO BE HELD OCTOBER 16, 2008

To the Stockholders of Applied Biosystems Inc.:

Applied Biosystems invites you to attend the special meeting of stockholders of Applied Biosystems Inc., a Delaware corporation formerly known as Applera Corporation, which will be held on October 16, 2008, at 9:30 a.m., Eastern time at Applied Biosystems headquarters, located at 301 Merritt 7, Main Avenue (old U.S. Route 7), Norwalk, Connecticut, 06851 for the following purposes:

to consider and vote on a proposal to approve and adopt the Agreement and Plan of Merger, dated as of June 11, 2008, as amended by Amendment No. 1 thereto, dated as of September 9, 2008, by and among Invitrogen Corporation, a Delaware corporation, Atom Acquisition, LLC, a Delaware limited liability company and a direct wholly-owned subsidiary of Invitrogen Corporation, and Applied Biosystems Inc. (formerly known as Applera Corporation), copies of the Agreement and Plan of Merger and Amendment No. 1 are attached as Annexes A and B, respectively, to the joint proxy statement/prospectus accompanying this notice, and to approve the merger of Applied Biosystems Inc. with and into Atom Acquisition, LLC; and

to vote upon an adjournment of the Applied Biosystems special meeting of stockholders, if necessary, to solicit additional proxies if there are not sufficient votes for the foregoing proposal.

Please refer to the accompanying joint proxy statement/prospectus for further information with respect to the business to be transacted at the Applied Biosystems special meeting of stockholders.

The close of business on September 5, 2008, has been fixed as the record date for the determination of stockholders entitled to notice of, and to vote at, the Applied Biosystems special meeting of stockholders or any adjournments or postponements thereof. Only holders of record at the close of business on the record date of the common stock of Applied Biosystems Inc. are entitled to notice of, and to vote at, the Applied Biosystems special meeting of stockholders.

Approval and adoption of the Agreement and Plan of Merger require the affirmative vote of holders of a majority of the outstanding shares of the common stock of Applied Biosystems Inc. entitled to vote on the proposal.

The board of directors of Applied Biosystems Inc. has approved the Agreement and Plan of Merger and the transactions contemplated thereby and recommends that you vote FOR adoption of the Agreement and Plan of Merger.

Whether or not you plan to attend the Applied Biosystems special meeting of stockholders, please complete, sign and date the enclosed proxy card and return it promptly in the enclosed postage-paid return envelope or submit your proxy by telephone or over the internet as soon as possible. You may revoke the proxy at any time prior to its exercise in the manner described in the joint proxy statement/prospectus. Any stockholder of record present at the Applied Biosystems special meeting of stockholders, including any adjournment or postponement of such meeting, may revoke its proxy card and vote personally. If your shares are held in the name of a bank, broker or other fiduciary, please follow the instructions on the voting instruction card furnished by the record holder.

A list of the holders of the common stock of Applied Biosystems Inc. entitled to vote at the Applied Biosystems special meeting of stockholders will be available for examination by any stockholder, for any purpose germane to the special meeting, at the principal executive offices of Applied Biosystems Inc. at 301

Table of Contents

Merritt 7, Norwalk, Connecticut 06851, for ten days prior to the special meeting, between the hours of 9:00 a.m. and 3:00 p.m., and at the special meeting during the entire time thereof.

By Order of the Board of Directors,

Thomas P. Livingston

Vice President and Secretary

Norwalk, Connecticut

September 10, 2008

Table of Contents

REFERENCES TO ADDITIONAL INFORMATION

This joint proxy statement/prospectus incorporates important business and financial information about Invitrogen and ABI from documents that are not included in or delivered with this document. You can obtain documents incorporated by reference in this document, other than certain exhibits to those documents, by requesting them in writing or by telephone from Invitrogen or ABI, as applicable, at the following address:

| | |
|----------------------------|----------------------------|
| Invitrogen Corporation | Applied Biosystems Inc. |
| 5791 Van Allen Way | 301 Merritt 7 |
| Carlsbad, California 92008 | Norwalk, Connecticut 06851 |
| Attn: Investor Relations | Attn: Corporate Secretary |
| (760) 603-7200 | (203) 840-2000 |

If you are an Invitrogen stockholder, you also may obtain documents incorporated by reference in this joint proxy statement/prospectus by requesting them by writing to Invitrogen Corporation, 5791 Van Allen Way, Carlsbad, California 92008, or by calling (760) 603-7200, or contacting Invitrogen's proxy solicitor, at the following address and telephone number:

The Altman Group
1200 Wall Street West
Third Floor
Lyndhurst, New Jersey 07071
(866) 530-8621

If you are an Applied Biosystems stockholder, you also may obtain documents incorporated by reference in this joint proxy statement/prospectus by requesting them by writing to Applied Biosystems Inc., 301 Merritt 7, Norwalk, Connecticut 06851, Attention: Corporate Secretary, or by calling (203) 840-2000, or contacting the proxy solicitor of ABI, at the following address and telephone number:

Morrow & Co., LLC
470 West Avenue
Stamford, Connecticut 06902
(800) 607-0088

You will not be charged for any documents that you request. If you would like to request documents, please do so by October 1, 2008, in order to receive timely delivery of the documents in advance of the special meeting of stockholders.

See [Additional Information Where You Can Find More Information](#) for a detailed description of the documents incorporated by reference into this joint proxy statement/prospectus.

Information contained on the websites of Invitrogen and ABI is expressly not incorporated by reference into this joint proxy statement/prospectus.

Table of Contents

ABOUT THIS DOCUMENT

This document, which forms part of a registration statement on Form S-4 filed with the U.S. Securities and Exchange Commission, which is referred to herein as the SEC, by Invitrogen (File No. 333-152741), constitutes a prospectus of Invitrogen under Section 5 of the Securities Act of 1933, as amended, which is referred to as the Securities Act, with respect to the shares of Invitrogen common stock to be issued to Applied Biosystems stockholders in the merger pursuant to the merger agreement.

This document also constitutes a notice of meeting and a proxy statement under Section 14(a) of the Securities Exchange Act of 1934, as amended, which is referred to as the Exchange Act, with respect to the Invitrogen special meeting of stockholders, at which Invitrogen stockholders will be asked to consider and vote upon certain proposals, including a proposal to approve the issuance of shares of Invitrogen common stock to Applied Biosystems stockholders in the merger pursuant to the merger agreement, to increase the number of authorized shares of common stock, and with respect to the Applied Biosystems special meeting of stockholders, at which Applied Biosystems stockholders will be asked to consider and vote upon a proposal to approve and adopt the merger agreement.

From 1999 until June 30, 2008, Applied Biosystems Inc., which was then known as Applera Corporation, had two classes of common stock that were intended to reflect the relative performance of its two business groups, the Applied Biosystems business group and the Celera business group (which was previously known as the Celera Genomics business group). On July 1, 2008, Applera Corporation completed the separation of its Celera business group into an independent publicly traded company known as Celera Corporation. Following the separation of its Celera business group, the Applied Biosystems business group was the only business of Applera Corporation, and Applera Corporation changed its name to Applied Biosystems Inc. In this document, unless the context requires otherwise, references to ABI for periods ended on or before July 1, 2008, refer to Applera Corporation, and references to ABI for periods after July 1, 2008, refer to Applied Biosystems Inc., after giving effect to the separation of the Celera business group and the name change referenced above. In addition, references to Applied Biosystems stock refer to the Applera Corporation Applied Biosystems Group Common Stock, par value \$0.01 per share, which after the separation of the Celera business group was ABI's sole outstanding class of common stock, and references to Applied Biosystems stockholders are to holders of Applied Biosystems stock. For more information regarding the separation of the Celera business group, see the section of this joint proxy statement/prospectus captioned The Merger Background of the Merger.

References in this document to the merger agreement are references to the Agreement and Plan of Merger, dated as of June 11, 2008, by and among Invitrogen Corporation, Atom Acquisition, LLC, and ABI, as amended on September 9, 2008.

Table of Contents

TABLE OF CONTENTS

| | |
|---|-----|
| <u>QUESTIONS AND ANSWERS ABOUT THE MERGER AND SPECIAL MEETINGS OF STOCKHOLDERS OF INVITROGEN AND APPLIED BIOSYSTEMS</u> | 1 |
| <u>SUMMARY</u> | 10 |
| <u>The Companies</u> | 10 |
| <u>The Merger</u> | 11 |
| <u>Opinions of Financial Advisors</u> | 15 |
| <u>Ownership of Invitrogen after the Merger</u> | 16 |
| <u>Interests of Invitrogen's Directors and Executive Officers in the Merger</u> | 16 |
| <u>Interests of ABI's Directors and Executive Officers in the Merger</u> | 17 |
| <u>Management of Invitrogen After the Merger</u> | 17 |
| <u>Invitrogen Name Change</u> | 17 |
| <u>Listing of Invitrogen Common Stock and Delisting and Deregistration of Applied Biosystems Stock</u> | 17 |
| <u>Appraisal Rights</u> | 18 |
| <u>Conditions to Completion of the Merger</u> | 18 |
| <u>Regulatory Approvals</u> | 19 |
| <u>Financing Commitments</u> | 19 |
| <u>No Solicitation by Invitrogen or ABI</u> | 20 |
| <u>Termination of the Merger Agreement</u> | 20 |
| <u>Termination Fee</u> | 21 |
| <u>Material U.S. Federal Income Tax Consequences of the Merger</u> | 21 |
| <u>Accounting Treatment</u> | 21 |
| <u>Risk Factors</u> | 22 |
| <u>Comparison of Stockholder Rights and Corporate Governance Matters</u> | 22 |
| <u>Fees and Expenses</u> | 22 |
| <u>Summary Selected Historical Financial Data</u> | 23 |
| <u>RISK FACTORS</u> | 28 |
| <u>Risks Related to the Merger</u> | 28 |
| <u>Risks Related to the Combined Company</u> | 34 |
| <u>CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS</u> | 38 |
| <u>INFORMATION ABOUT INVITROGEN</u> | 40 |
| <u>INFORMATION ABOUT ABI</u> | 41 |
| <u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u> | 42 |
| <u>THE MERGER</u> | 45 |
| <u>THE MERGER AGREEMENT</u> | 101 |
| <u>Covenants and Agreements</u> | 110 |
| <u>MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE MERGER</u> | 131 |
| <u>COMPARATIVE STOCK PRICES AND DIVIDENDS</u> | 135 |
| <u>THE INVITROGEN SPECIAL MEETING OF STOCKHOLDERS</u> | 138 |
| <u>THE APPLIED BIOSYSTEMS SPECIAL MEETING OF STOCKHOLDERS</u> | 143 |
| <u>COMPARISON OF STOCKHOLDER RIGHTS AND CORPORATE GOVERNANCE MATTERS</u> | 147 |
| <u>ADDITIONAL INFORMATION</u> | 159 |
| <u>Stockholder Proposals</u> | 159 |
| <u>Legal Matters</u> | 160 |
| <u>Experts</u> | 160 |
| <u>Where You Can Find More Information</u> | 160 |

Table of Contents

Annexes

| | |
|----------------|---|
| Annex A | Agreement and Plan of Merger |
| Annex B | Amendment No. 1 to Agreement and Plan of Merger |
| Annex C | Opinion of Moelis & Company LLC |
| Annex D | Opinion of UBS Securities LLC |
| Annex E | Opinion of Morgan Stanley & Co. Incorporated |
| Annex F | Opinion of Greenhill & Co., LLC |
| Annex G | Form of Amendment to the Invitrogen Restated Certificate of Incorporation |
| Annex H | Section 262 of the General Corporation Law of the State of Delaware |
| Annex I | Unaudited Pro Forma Condensed Combined Financial Statements |

Table of Contents

QUESTIONS AND ANSWERS ABOUT THE MERGER AND SPECIAL MEETINGS OF STOCKHOLDERS OF INVITROGEN AND APPLIED BIOSYSTEMS

*The following are some questions that you, as a stockholder of Invitrogen or ABI, may have regarding the respective special meetings of stockholders of Invitrogen and ABI and brief answers to those questions. For more detailed information about the matters discussed in these questions and answers, see *The Invitrogen Special Meeting of Stockholders* and *Applied Biosystems Special Meeting of Stockholders*. Invitrogen and ABI urge you to read carefully the remainder of this joint proxy statement/prospectus because the information in this section does not provide all the information that might be important to you with respect to the merger and the other matters being considered at the respective special meetings of stockholders. Additional important information is also contained in the Annexes to and the documents incorporated by reference in this joint proxy statement/prospectus.*

Q: Why am I receiving this joint proxy statement/prospectus?

A: You are receiving this joint proxy statement/prospectus because you are a stockholder of either Invitrogen or ABI as of the respective record date for the companies' special meetings of their stockholders. This joint proxy statement/prospectus is being used by the boards of directors of Invitrogen and ABI to solicit your proxy for use at the special meetings of stockholders of Invitrogen and Applied Biosystems. This joint proxy statement/prospectus also serves as the prospectus for shares of Invitrogen common stock to be issued in exchange for shares of Applied Biosystems stock in connection with the merger.

This joint proxy statement/prospectus contains important information about the proposed merger, the merger agreement and the special meetings of stockholders of Invitrogen and Applied Biosystems, which information you should read carefully before voting. The enclosed voting materials allow you to cause your shares of Invitrogen common stock or Applied Biosystems stock to be voted without attending the Invitrogen special meeting of stockholders or the Applied Biosystems special meeting of stockholders, as applicable, in person.

About the Merger

Q: What will happen in the merger?

A: The proposed merger will combine the businesses of Invitrogen and ABI. At the effective time of the merger, ABI will merge with and into Atom Acquisition, LLC, or Atom Acquisition, a direct wholly owned subsidiary of Invitrogen, and Atom Acquisition will be the surviving entity. As a result of the merger, ABI will cease to exist, and its businesses will be owned by Invitrogen, which will continue as a public company. Following the merger, the combined company is expected to be a global leader in biotechnology reagents and systems generating approximately \$3.5 billion in combined sales, with significant commercial, operational and technical scale, that Invitrogen's management believes will uniquely position the combined company to accelerate and drive new discoveries and commercial applications. Immediately following the merger, a newly formed corporation wholly owned by Invitrogen will merge with and into Invitrogen, with Invitrogen continuing as the surviving corporation, for the sole purpose of changing the name of Invitrogen to Applied Biosystems Inc.

Q: What will I receive for my Applied Biosystems stock?

A: In exchange for your shares of Applied Biosystems stock, you may make one of the following elections regarding the type of merger consideration you wish to receive for each share of Applied Biosystems stock:

mixed consideration election to receive \$17.10 in cash, without interest, and 0.4543 shares of Invitrogen common stock;

a cash election to receive \$38.00 in cash, without interest; or

a stock election to receive 0.8261 shares of Invitrogen common stock.

Table of Contents

If you make a cash election or a stock election, the form of merger consideration that you actually receive as an Applied Biosystems stockholder may be adjusted as a result of the proration procedures contained in the merger agreement as described in this joint proxy statement/prospectus under **The Merger Agreement Election Procedures; Allocation of Merger Consideration Allocation of Merger Consideration**. No guarantee can be made that you will receive the amount of cash consideration or stock consideration you elect. As a result of the proration procedures provided for in the merger agreement, as described in this joint proxy statement/prospectus, you may receive stock consideration or cash consideration in amounts that are different from the amounts you elect to receive.

If all or part of the consideration you elect to receive is in the form of shares of Invitrogen common stock and the arithmetic average of the volume-weighted average price of Invitrogen common stock during the 20 consecutive trading days immediately preceding the third business day before the effective time of the merger, or the 20-day VWAP of Invitrogen common stock, is less than \$46.00 per share, you will also receive an additional cash payment of up to \$1.05 per share if you elect mixed consideration, or up to \$1.91 per share if you elect stock consideration, as described in greater detail in this joint proxy statement/prospectus under **The Merger Agreement Merger Consideration Adjustment Based on Price of Invitrogen Shares**. If, however, the 20-day VWAP of Invitrogen common stock is less than \$43.69 per share, you will not receive any further cash above that referred to in the preceding sentence. There will not be any adjustment to the merger consideration if the 20-day VWAP of Invitrogen common stock is greater than \$46.00 per share. Applied Biosystems stockholders who receive only cash consideration will not receive any additional amounts.

Q: Is the value of the per share consideration that I receive for my shares of Applied Biosystems stock expected to be substantially equivalent regardless of which election I make?

A: The formulas that will be used to calculate the per share consideration are designed to equalize substantially the value of the consideration to be received for each share of Applied Biosystems stock in the merger at the time the calculation is made, regardless of whether you elect to receive a combination of cash and stock, all cash, all stock or do not make an election, for your shares of Applied Biosystems stock. If, however, the 20-day VWAP of Invitrogen common stock is less than \$43.69 per share, there will be no further cash adjustment to the stock election or mixed election consideration, and therefore Applied Biosystems stockholders electing to receive cash consideration may receive consideration with a higher value at the effective time of the merger, although these holders of Applied Biosystems stock will not participate in any future appreciation of the combined company.

Q: How do I make an election for the type of merger consideration that I prefer to receive and when can I expect to receive the merger consideration?

A: Each holder of record of Applied Biosystems stock as of the close of business on the record date for notice of the Applied Biosystems special meeting of stockholders will be mailed an election form and other appropriate and customary transmittal materials. Each Applied Biosystems stockholder should specify in the election form (1) the number of shares of Applied Biosystems stock which such stockholder elects to have exchanged for mixed consideration of cash and Invitrogen common stock (2) the number of shares of Applied Biosystems stock such stockholder elects to have exchanged for stock consideration in the merger, and (3) the number of shares of Applied Biosystems stock for which such stockholder elects to receive only cash consideration. Any Applied Biosystems stockholder who does not make an election to receive mixed consideration, stock consideration or cash consideration will be deemed to have made an election to receive mixed consideration.

Q: What is the deadline for making an election?

A: Your election, to be properly made, must be received by American Stock Transfer and Trust Company, LLC, the exchange agent for the merger, at its designated office by 5:00 p.m. New York City time on the date of the Applied Biosystems special meeting of stockholders or, if the closing date is more than four

Table of Contents

business days following the Applied Biosystems special meeting of stockholders, by 5:00 p.m. on the day two business days preceding the closing date of the merger. Invitrogen and ABI will publicly announce the anticipated election deadline at least five business days before the anticipated closing date of the merger.

Q: What happens if I do not send a form of election or it is not received by the election deadline?

A: If the exchange agent does not receive a properly completed form of election from you at or prior to the election deadline (together with any stock certificates representing the shares of Applied Biosystems stock covered by your election or a guarantee of delivery as described in the form of election), then you will be deemed to have elected to receive mixed consideration with respect to your shares of Applied Biosystems stock. You bear the risk of delivery of all the materials that you are required to submit to the exchange agent in order to properly make an election.

Q: Can I change my election after the form of election has been submitted?

A: Yes. You may revoke your election at or prior to the election deadline by submitting a written notice of revocation to the exchange agent. Revocations must specify the name in which your shares are registered on the share transfer books of ABI and such other information as the exchange agent may request. If you wish to submit a new election, you must do so in accordance with the election procedures described in this joint proxy statement/prospectus and the election form. If you instructed a broker or other nominee holder to submit an election for your shares, you must follow your broker's or other nominee's directions for changing those instructions. The notice of revocation must be received by the exchange agent at or prior to the election deadline in order for the revocation to be valid.

Q: May I transfer shares of Applied Biosystems stock after making an election?

A: Yes, but only if you revoke your election or the merger agreement is terminated. Once you properly make an election with respect to any shares of Applied Biosystems stock, you will be unable to sell or otherwise transfer those shares, unless you properly revoke your election at or prior to the election deadline or unless the merger agreement is terminated.

Q: May I transfer shares of Applied Biosystems stock before the Applied Biosystems special meeting of stockholders?

A: Yes. The record date of the Applied Biosystems special meeting of stockholders is earlier than the Applied Biosystems special meeting of stockholders and the date that the merger is expected to be completed. If you transfer your shares of Applied Biosystems stock after the record date but before the Applied Biosystems special meeting of stockholders, you will retain your right to vote at the special meeting, but you will have transferred the right to receive the merger consideration in the merger. In order to receive the merger consideration, you must hold your shares through completion of the merger.

Q: Are there any risks related to the merger that I should consider?

A: In evaluating the merger, you should carefully read this joint proxy statement/prospectus and carefully consider the risk factors discussed in the section entitled "Risk Factors" of this joint proxy statement/prospectus, as well as those risk factors with respect to Invitrogen and ABI incorporated by reference into this joint proxy statement/prospectus.

Q:

Edgar Filing: INVITROGEN CORP - Form S-4/A

Is this merger also subject to any conditions or approvals, other than approval by Applied Biosystems stockholders and the stockholders of Invitrogen?

A: Yes. In addition to stockholder approval, the completion of the merger is contingent upon, among other things, the following:

the receipt of tax opinions from counsel for each of Invitrogen and ABI substantially to the effect that the merger will be treated as a reorganization within the meaning of Section 368(a) of the Internal

Table of Contents

Revenue Code of 1986, as amended, or the Internal Revenue Code, and that each of Invitrogen and ABI will be treated as the party to a reorganization within the meaning of Section 368(b) of the Internal Revenue Code;

the absence of any law or court order that prohibits the merger;

the expiration or termination of the applicable waiting periods under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, or the HSR Act, the statutory waiting period under which expired at 11:59 p.m. on July 28, 2008, and the European Commission Merger Regulation, or ECMR, as well as the approval of competition regulatory authorities in several other countries;

the approval for listing on the NASDAQ Global Select Market of the shares of Invitrogen common stock to be issued pursuant to the merger; and

other customary conditions, including the absence of a material adverse effect on Invitrogen or ABI.

Q: When will this merger be completed?

A: Invitrogen and ABI expect to complete the merger promptly following the Invitrogen special meeting of stockholders and the Applied Biosystems special meeting of stockholders. However, neither Invitrogen nor ABI can predict the exact timing of completion of the merger because it is subject to a number of conditions both within and beyond their respective control. See The Merger Agreement Conditions to Completion of the Merger.

Q: What happens if the merger is not completed?

A: If the merger agreement is not adopted by Applied Biosystems stockholders, if the issuance of Invitrogen common stock in the merger or the amendment to Invitrogen's restated certificate of incorporation is not approved by Invitrogen stockholders, or if the merger is not completed for any other reason, Applied Biosystems stockholders will not receive any payment for their shares in connection with the merger. Instead, ABI will remain an independent public company and Applied Biosystems stock will continue to be listed and traded on the NYSE. Under specified circumstances, Invitrogen or ABI may be required to pay the other party a termination fee as described under the section entitled The Merger Agreement Termination Fee.

Q: What are the federal income tax consequences of this merger for me?

A: The completion of the merger is conditioned upon the receipt by Invitrogen and ABI of tax opinions from their respective counsel dated as of the date of the merger substantially to the effect that the merger will be treated as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code, and that Invitrogen and ABI will each be treated as a party to the reorganization within the meaning of Section 368(b) of the Internal Revenue Code. Assuming that the merger so qualifies as a reorganization, which Invitrogen and ABI anticipate, in general, for U.S. federal income tax purposes:

Applied Biosystems stockholders who receive solely cash in the merger will generally recognize gain or loss;

Edgar Filing: INVITROGEN CORP - Form S-4/A

Applied Biosystems stockholders who receive solely Invitrogen common stock in the merger will not recognize any gain or loss as a result of the exchange (other than for cash received in lieu of any fractional share of Invitrogen common stock); and

Applied Biosystems stockholders who receive a combination of cash and Invitrogen common stock in the merger will not generally recognize any loss but will generally recognize gain, if any, to the extent of any cash received.

Table of Contents

Please review carefully the information under the caption "Material U.S. Federal Income Tax Consequences of the Merger" for a description of the material U.S. federal income tax consequences of the merger. The tax consequences to you will depend on your own situation. Please consult your tax advisors for a full understanding of the tax consequences of the merger to you.

Q: Where will the Invitrogen shares be traded after this merger?

A: Invitrogen common stock will continue to be traded on the NASDAQ Global Select Market.

Q: Are Applied Biosystems stockholders entitled to appraisal rights?

A: Yes. Applied Biosystems stockholders who do not wish to accept the consideration payable pursuant to the merger agreement will be entitled to appraisal rights under Section 262 of the General Corporation Law of the State of Delaware, or the DGCL, provided that they comply with the procedures described in Section 262 of the DGCL. For more information regarding appraisal rights, see "The Merger Appraisal Rights." In addition, a copy of Section 262 of the DGCL is attached to this joint proxy statement/prospectus as Annex H. Invitrogen stockholders are not entitled to appraisal rights in connection with the merger.

Q: What votes of Invitrogen stockholders are required?

A: In accordance with the NASDAQ Global Select Market listing requirements and the merger agreement, the approval by Invitrogen stockholders of the issuance of shares of Invitrogen common stock pursuant to the merger agreement requires a majority of the votes cast on the proposal, provided that the total votes cast on such proposal represent over 50% of the outstanding shares of Invitrogen common stock entitled to vote on such proposal. However, under Delaware law, the approval by Invitrogen stockholders of the amendment to the restated certificate of incorporation of Invitrogen to increase the number of authorized shares of common stock requires the affirmative vote of a majority of the outstanding shares of common stock. Accordingly, since the amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized shares is a condition to completion of the merger and is necessary for Invitrogen to issue the shares of Invitrogen common stock in the merger, the vote of more than 50% of the outstanding shares of Invitrogen common stock is effectively required to approve the issuance of shares of Invitrogen common stock in the merger.

The approval of the proposal to grant authority to the proxyholders to vote to adjourn the Invitrogen special meeting of stockholders requires the affirmative vote of the holders of a majority of the shares of Invitrogen common stock present in person or represented by proxy at the special meeting and entitled to vote thereon, whether or not a quorum is present.

Q: What vote of Applied Biosystems stockholders is required to adopt the merger agreement and approve the merger?

A: Under Delaware law and the rules of the NYSE, approval of the proposal to adopt the merger agreement and approve the merger requires the affirmative vote of the holders of a majority of the outstanding shares of Applied Biosystems stock entitled to vote at the Applied Biosystems special meeting of stockholders. The approval of the proposal to grant authority to the proxyholders to vote to adjourn the Applied Biosystems special meeting of stockholders requires the affirmative vote of the holders of a majority of the shares of Applied Biosystems stock present in person or represented by proxy at the Applied Biosystems special meeting of stockholders and entitled to vote thereon.

Q: What will happen to Applied Biosystems stock options, restricted stock and other equity awards in the merger?

Edgar Filing: INVITROGEN CORP - Form S-4/A

- A: With regard to options to purchase shares of Applied Biosystems stock, immediately prior to the completion of the merger, each outstanding unexpired and unexercised option to purchase or acquire shares

Table of Contents

of Applied Biosystems stock, whether or not vested or subject to any performance condition that has not been satisfied, will vest and become fully exercisable and be converted into an option to purchase the number of shares of Invitrogen common stock equal to the product of 0.8261 the exchange ratio of Applied Biosystems stock for Invitrogen common stock applicable to stockholders who elect to receive stock consideration in the merger multiplied by the number of shares that were subject to the old Applied Biosystems option (rounded down to the nearest whole share), at an exercise price per share equal to the exercise price of the old option divided by the stock election exchange ratio of 0.8261 (rounded up to the nearest cent). In the event that there is a cash adjustment to the stock election and mixed election merger consideration because the 20-Day VWAP of the Invitrogen common stock is between \$43.69 and \$46.00, then the percentage of a share of Invitrogen common stock issuable upon exchange of an option will be increased to give option holders the benefit of the adjustment to the stock exchange ratio, and the exercise price of the option will be proportionately reduced.

For restricted shares of Applied Biosystems stock, each outstanding share of such restricted stock, whether or not subject to any performance condition that has not been satisfied, will vest in full immediately prior to the closing of the merger and will be converted into the right to receive the mixed consideration of Invitrogen common stock and cash.

In addition, each outstanding right to receive Applied Biosystems stock pursuant to a restricted stock unit award which has not lapsed immediately prior to completion of the merger will become fully vested and settled in shares of Applied Biosystems stock that will be converted into the right to receive the mixed consideration consisting of Invitrogen common stock and cash. Each outstanding right to receive shares of Applied Biosystems stock that is held by a director who will not become a director of Invitrogen will be settled in shares of Applied Biosystems stock, and all such shares of Applied Biosystems stock will be converted in the merger into the right to receive the stock consideration consisting of Invitrogen common stock.

About the Special Meetings

Q: When and where will the special meetings of stockholders of Invitrogen and Applied Biosystems be held?

A: The Invitrogen special meeting of stockholders will take place on October 16, 2008, at 9:00 a.m., Pacific time, at Invitrogen's headquarters, 5781 Van Allen Way, Carlsbad, California 92008. The Applied Biosystems special meeting of stockholders will take place on October 16, 2008, at 9:30 a.m., Eastern time, at Applied Biosystems' headquarters, located at 301 Merritt 7, Main Avenue (old U.S. Route 7), Norwalk, Connecticut, 06851.

Q: Who can attend and vote at the special meetings of stockholders of Invitrogen and Applied Biosystems?

A: Only holders of record of Invitrogen common stock at the close of business on September 5, 2008, which is referred to as the Invitrogen record date, are entitled to notice of and to vote at the Invitrogen special meeting of stockholders. As of the Invitrogen record date, there were 92,117,285 shares of Invitrogen common stock outstanding and entitled to vote at the Invitrogen special meeting of stockholders, held by approximately 1,120 holders of record. Each holder of Invitrogen common stock is entitled to one vote for each share of Invitrogen common stock owned as of the Invitrogen record date.

Only holders of record of Applied Biosystems stock at the close of business on September 5, 2008, which is referred to as the Applied Biosystems record date, are entitled to notice of and to vote at the Applied Biosystems special meeting of stockholders. As of the Applied Biosystems record date, there were 169,541,084 shares of Applied Biosystems stock outstanding and entitled to vote at the Applied Biosystems special meeting of stockholders, held by approximately 4,792 holders of record. Each holder of Applied Biosystems stock is entitled to one vote for each share of Applied Biosystems stock owned as of the Applied Biosystems record date.

Table of Contents

Q: What are Invitrogen stockholders voting to approve and why is this approval necessary?

A: Invitrogen stockholders are voting on a proposal to approve the issuance of shares of Invitrogen common stock pursuant to the merger agreement, as required by the listing requirements of the NASDAQ Global Select Market, and to amend Invitrogen's restated certificate of incorporation to increase the number of authorized shares of common stock from 200,000,000 to 400,000,000. Approval of the proposal to approve the issuance of shares of Invitrogen common stock pursuant to the merger agreement is a condition to the completion of the merger, and approval of the proposal to amend Invitrogen's restated certificate of incorporation to increase the number of authorized shares is a condition to the completion of the merger and is necessary for Invitrogen to issue the shares of Invitrogen common stock in the merger. Invitrogen stockholders are also voting on a proposal to grant authority to the proxyholders to vote to adjourn the Invitrogen special meeting of stockholders, if necessary, to solicit additional proxies if there are not sufficient votes at the time of the Invitrogen special meeting of stockholders in favor of any or all the foregoing proposals. Approval of the proposal to adjourn the Invitrogen special meeting of stockholders to solicit additional proxies is not a condition to the consummation of the merger.

Q: What are Applied Biosystems stockholders voting to approve and why is this approval necessary?

A: Applied Biosystems stockholders are voting on a proposal to adopt and approve the merger agreement and approve the merger. The approval of this proposal by Applied Biosystems stockholders is required by Delaware law and the rules of the NYSE and is a condition to the completion of the merger. Applied Biosystems stockholders are also voting on a proposal to grant authority to the proxyholders to vote to adjourn or postpone the Applied Biosystems special meeting of stockholders, if necessary, to permit further solicitation of proxies if there are not sufficient votes at the time of the special meeting in favor of the merger proposal. Approval of this proposal is not a condition to completion of the merger.

Q: What should Invitrogen and Applied Biosystems stockholders do now in order to vote on the proposals being considered at their respective special meetings?

A: Stockholders of record of Invitrogen as of the Invitrogen record date and stockholders of record of ABI as of the Applied Biosystems record date may vote now by proxy by completing, signing, dating and returning the enclosed proxy card in the accompanying pre-addressed postage paid envelope or by telephone or the internet by following the instructions on the enclosed proxy card. If your shares of Invitrogen common stock or shares of Applied Biosystems stock are held of record by a broker, bank or nominee, or in street name, you must provide the record holder of your shares with instructions on how to vote your shares. Please refer to the voting instruction card used by your broker, bank or nominee to see if you may submit voting instructions using the telephone or internet. Additionally, you may also vote in person by attending your company's special meeting of stockholders. If you plan to attend your company's special meeting and wish to vote in person, you will be given a ballot at the special meeting of stockholders. Please note, however, that if your shares are held in street name, and you wish to vote in person at your company's special meeting of stockholders, you must bring a proxy from the record holder of the shares authorizing you to vote at the special meeting of stockholders. Whether or not you plan to attend your company's special meeting of stockholders, you are encouraged to cast your proxy as described in this joint proxy statement/prospectus.

Q: How do I vote my Invitrogen 401(k) shares?

A: If you participate in the Invitrogen 401(k) Savings and Investment Plan you may vote the shares of Invitrogen common stock in your account as of the Invitrogen record date. If you wish to vote these shares, you must complete your proxy card and return it in the envelope provided by October 14, 2008.

If you do not complete and return your proxy card prior to October 14, 2008, Fidelity Management Trust Company, the plan trustee, will vote the shares in your account. You may revoke instructions to the plan trustee by giving it written notice of revocation or a later dated written voting instruction by October 14, 2008.

Table of Contents

Q: Can I change my vote after I have delivered my proxy?

A: Yes. If you are a holder of record, you can change your vote at any time before your proxy is voted at the special meeting of stockholders by:

delivering a signed written notice of revocation to the corporate secretary of your company at:

| | |
|----------------------------|----------------------------|
| Invitrogen Corporation | Applied Biosystems Inc. |
| 5791 Van Allen Way | 301 Merritt 7 |
| Carlsbad, California 92008 | Norwalk, Connecticut 06851 |
| Attn: Corporate Secretary | Attn: Corporate Secretary |

signing and delivering a new, valid proxy bearing a later date, and if it is a written proxy, it must be signed and delivered to the attention of your company's corporate secretary;

submitting another proxy by telephone or the internet (your latest telephone or internet voting instructions are followed); or

attending the special meeting of stockholders and voting in person, although your attendance alone will not revoke your proxy. If your shares are held in a street name account, you must contact your broker, bank or other nominee to change your vote.

Q: What will happen if I abstain from voting or fail to vote?

A: For purposes of the Invitrogen special meeting of stockholders, an abstention, which occurs when a stockholder attends a special meeting, either in person or by proxy, but abstains from voting, will have the same effect as voting against (1) the issuance of shares of Invitrogen common stock pursuant to the merger agreement, (2) the amendment to the restated certificate of incorporation to increase the number of authorized shares of common stock and (3) the approval of the adjournment proposal. If you hold your Invitrogen common stock in street name through a brokerage account, your broker will vote your shares only if you provide instructions on how to vote by filling out the voter instruction form sent to you by your broker with this joint proxy statement/prospectus. Broker non-votes are shares held by a broker or other nominee that are represented at the Invitrogen special meeting of stockholders, but with respect to which the broker or nominee is not instructed by the beneficial owner of such shares to vote on the particular proposal and the broker does not have discretionary voting power on such proposal. A broker non-vote will have the same effect as a vote against the proposal to amend Invitrogen's restated certificate of incorporation; a broker non-vote will have no effect on the proposals to issue shares of Invitrogen common stock, and adjourn the special meeting. Failure to vote will have the same effect as a vote against the proposal to amend Invitrogen's restated certificate of incorporation but will have no effect on the outcome of the proposal to issue shares of Invitrogen common stock, and adjourn the special meeting, assuming a quorum is otherwise present at the special meeting.

Because under Delaware law adoption of the merger agreement requires the affirmative vote of the holders of a majority of the outstanding shares of Applied Biosystems stock, failures to vote, broker non-votes and abstentions will have the same effect as votes against the adoption of the merger agreement. Broker non-votes and abstentions will be counted, however, as present for the purpose of determining whether a quorum is present. Abstentions will have the same effect as votes against the proposal to adjourn or postpone the special meeting, if necessary for the purpose of soliciting additional proxies, but broker non-votes will have no effect on the proposal to adjourn the special meeting. If you hold your Applied Biosystems stock in street name through a brokerage account, your broker will vote your shares only if you provide instructions on how to vote by filling out the voter instruction form sent to you by your broker with this joint proxy statement/prospectus. Failure to vote will have no

effect on the outcome of the proposal to adjourn the special meeting, assuming a quorum is otherwise present at the special meeting.

Table of Contents

Q: What should Invitrogen stockholders or Applied Biosystems stockholders do if they receive more than one set of voting materials?

A: You may receive more than one set of voting materials, including multiple copies of this joint proxy statement/prospectus and multiple proxy cards or voting instruction cards. For example, if you hold your shares in more than one brokerage account, you will receive a separate voting instruction card for each brokerage account in which you hold shares. If you are a holder of record and your shares are registered in more than one name, you will receive more than one proxy card. In addition, if you are a holder of both Invitrogen common stock and Applied Biosystems stock, you will receive one or more separate proxy cards or voting instruction cards for each company. Please complete, sign, date and return each proxy card and voting instruction card that you receive or otherwise follow the voting instructions set forth in this joint proxy statement/prospectus under the caption "The Invitrogen Special Meeting of Stockholders" and "The Applied Biosystems Special Meeting of Stockholders."

Q: What if my Applied Biosystems stock certificates have been lost, stolen, or destroyed?

A: If any of your Applied Biosystems stock certificates have been lost, stolen, or destroyed, please call ABI's transfer agent, Computershare Trust Company, N.A., which will assist you in obtaining replacement certificate(s). To make a cash election or a stock election, Applied Biosystems stockholders of record must properly complete, sign and send the form of election and any stock certificates representing their shares of Applied Biosystems stock, or a guarantee of delivery as described in the instructions accompanying the form of election, to the exchange agent. The exchange agent must receive these documents at or prior to the election deadline. Accordingly, you are urged to determine promptly if you require any replacement stock certificates.

Q: Should Applied Biosystems stockholders send in their Applied Biosystems stock certificates now?

A: Applied Biosystems stockholders will be sent separately an election form that includes written instructions for exchanging their stock certificates for the merger consideration. You must submit a properly completed election form, together with the certificates for your shares or confirmation of the book-entry transfer of your shares if they are not certificated, by no later than the election deadline, which will be 5:00 p.m. New York City time on the date of the Applied Biosystems special meeting of stockholders or, if the closing date is more than four business days following the Applied Biosystems special meeting of stockholders, by 5:00 p.m. on the day two business days preceding the closing date of the merger. Invitrogen and ABI will publicly announce the anticipated election deadline at least five business days before the anticipated closing date of the Merger.

Q: Who can help answer my questions?

A: If you have any questions about the merger or how to submit your proxy, or if you need additional copies of this joint proxy statement/prospectus, the enclosed proxy card or voting instructions, you should contact:

If you are an Invitrogen stockholder:

Invitrogen Corporation
5791 Van Allen Way
Carlsbad, California 92008
Attn: Corporate Secretary

or

The Altman Group
1200 Wall Street West
Third Floor
Lyndhurst, New Jersey 07071

Edgar Filing: INVITROGEN CORP - Form S-4/A

(760) 603-7200

(866) 530-8621

If you are an Applied Biosystems stockholder:

or

Applied Biosystems Inc.

Morrow & Co., LLC

301 Merritt 7

470 West Avenue

Norwalk, Connecticut 06851

Stamford, Connecticut 06902

Attn: Corporate Secretary

(800) 607-0088

(203) 840-2000

Table of Contents

SUMMARY

*The following is a summary that highlights information contained in this joint proxy statement/prospectus. This summary may not contain all of the information that may be important to you. For a more complete description of the merger agreement and the transactions contemplated by the merger agreement, including the merger and the share issuance, Invitrogen and ABI encourage you to read carefully this entire joint proxy statement/prospectus, including the attached Annexes. In addition, Invitrogen and ABI encourage you to read the information incorporated by reference into this joint proxy statement/prospectus, which includes important business and financial information about Invitrogen and ABI that has been filed with the SEC. You may obtain the information incorporated by reference into this joint proxy statement/prospectus without charge by following the instructions in the section entitled *Additional Information Where You Can Find More Information*.*

The Companies

Invitrogen Corporation

5791 Van Allen Way

Carlsbad, California 92008

Telephone: (760) 603-7200

Invitrogen is a leading developer, manufacturer and marketer of research tools in reagent, kit and high-throughput applications forms to customers engaged in life sciences research, drug discovery, diagnostics and the commercial manufacture of biological products. Additionally, Invitrogen is a leading supplier of sera, cell and tissue culture media and reagents used in life sciences research, as well as in processes to grow cells in the laboratory and produce pharmaceuticals and other highly valued proteins. Invitrogen common stock is listed on the NASDAQ Global Select Market under the symbol **IVGN**.

Invitrogen offers many different products and services, and is continually developing and/or acquiring others. Some of its specific product categories include the following:

High-throughput gene cloning and expression technology, which allows customers to clone and expression-test genes on an industrial scale;

Pre-cast electrophoresis products, which improve the speed, reliability and convenience of separating nucleic acids and proteins;

Antibodies, which allow researchers to capture and label proteins, visualize their location through use of Molecular Probes dyes and discern their role in disease;

Magnetic beads, which are used in a variety of settings, such as attachment of molecular labels, nucleic acid purification, and organ and bone marrow tissue type testing;

Molecular Probes fluorescence-based technologies, which facilitate the labeling of molecules for biological research and drug discovery;

Transfection reagents, which are widely used to transfer genetic elements into living cells enabling the study of protein function and gene regulation; and

Edgar Filing: INVITROGEN CORP - Form S-4/A

Media and serum, which allow researchers to grow cells for research and industrial scale customers to develop and grow biological large molecule products.

Applied Biosystems Inc.

301 Merritt 7

Norwalk, Connecticut 06851

Telephone: (203) 840-2000

ABI, formerly known as Applied Biosystems Corporation, is a global leader in the development and marketing of instrument-based systems, consumables, software, and services for academic research, the life science industry

Table of Contents

and commercial markets. Driven by its employees' belief in the power of science to improve the human condition, ABI commercializes innovative technology solutions for DNA, RNA, protein and small molecule analysis. Customers across the disciplines of academic and clinical research, pharmaceutical research and manufacturing, forensic DNA analysis, and agricultural biotechnology use ABI's tools and services to accelerate scientific discovery, improve processes related to drug discovery and development, detect potentially pathogenic microorganisms, and identify individuals based on DNA sources. ABI has a comprehensive service and field applications support team for a global installed base of high-performance genetic and protein analysis solutions. Applied Biosystems stock is listed on the New York Stock Exchange under the symbol ABI.

Atom Acquisition, LLC

Atom Acquisition, a Delaware limited liability company, is a direct wholly-owned subsidiary of Invitrogen. Atom Acquisition was formed exclusively for the purpose of effecting the merger.

The Merger (see page 44)

On June 11, 2008, Invitrogen, Atom Acquisition and ABI entered into merger agreement described in this joint proxy statement/prospectus. The merger agreement was amended on September 9, 2008, and all references to the merger agreement include the amendment. Pursuant to the merger agreement, ABI will merge with and into Atom Acquisition, a direct wholly owned subsidiary of Invitrogen, with Atom Acquisition continuing as the surviving company and a wholly owned subsidiary of Invitrogen. As a result of the merger, ABI will cease to exist, and its businesses will be owned by Invitrogen and Invitrogen will continue as a public company. Immediately following the merger, a newly formed corporation wholly owned by Invitrogen will then merge with and into Invitrogen, with Invitrogen continuing as the surviving corporation for the sole purpose of changing the name of Invitrogen to Applied Biosystems Inc. Invitrogen and ABI have attached the merger agreement as Annex A and the amendment to the merger agreement as Annex B to this joint proxy statement/prospectus and encourage you to carefully read the merger agreement and the amendment to the merger agreement in their entirety.

Merger Consideration

The merger agreement provides that at the effective time of the merger, each outstanding share of Applied Biosystems stock will be converted into the right to receive either a combination of cash and shares of Invitrogen common stock or all cash or all shares of Invitrogen common stock, in each case subject to the election and allocation procedures described in this joint proxy statement/prospectus. The actual amount of cash or number of shares of Invitrogen common stock that you will receive for each share of Applied Biosystems stock will be determined based on formulas set forth in the merger agreement and described under the heading "The Merger Agreement Merger Consideration Conversion of Shares."

If you are an Applied Biosystems stockholder, other than an Applied Biosystems stockholder that has validly demanded and perfected appraisal rights under Delaware law, you may make one of the following elections regarding the type of merger consideration you wish to receive for each share of Applied Biosystems stock you hold:

a mixed consideration election to receive \$17.10 in cash, without interest, and 0.4543 shares of Invitrogen common stock;

a cash election to receive \$38.00 in cash, without interest; or

a stock election to receive 0.8261 shares of Invitrogen common stock.

If you make a cash election or a stock election, the form of merger consideration that you actually receive as an Applied Biosystems stockholder may be adjusted as a result of the proration procedures contained in the merger agreement as described in this joint proxy statement/prospectus under "The Merger Agreement Election"

Table of Contents

Procedures; Allocation of Merger Consideration Allocation of Merger Consideration. Invitrogen and ABI cannot guarantee that you will receive the amount of cash consideration or stock consideration you elect. As a result of the proration procedures described in this joint proxy statement/prospectus and in the merger agreement, you may receive cash consideration or stock consideration in amounts that are different from the amounts you elect to receive. If all or part of your consideration is in the form of shares of Invitrogen common stock and the 20-day VWAP of Invitrogen common stock is less than \$46.00 per share, you will also receive an additional cash payment of up to \$1.05 per share if you elect mixed consideration, or up to \$1.91 per share if you elect stock consideration, as described below. If you make a cash election and, following the proration procedures, receive \$38.00 in cash for each share of Applied Biosystems stock, you will not receive any additional amounts.

The total number of shares of Invitrogen common stock comprising the stock consideration and the total amount of cash consideration will not change from what was agreed to in the merger agreement (other than for adjustment in the event that there is any change in the outstanding shares of capital stock of Invitrogen or Applied Biosystems as a result of any reclassification, recapitalization, stock split (including a reverse stock split) or combination, exchange or readjustment of shares, or any stock dividend or stock distribution with a record date between June 11, 2008 and the effective time of the merger). However, if the 20-day VWAP of Invitrogen common stock is less than \$46.00 per share, then the holder of each share of Applied Biosystems stock that is converted into a right to receive any portion of the merger consideration in the form of shares of Invitrogen common stock will receive, in addition, an amount in cash without interest, which is referred to herein as the additional cash amount, equal to the product of (x) the portion of a share of Invitrogen common stock which such holder has the right to receive multiplied by (y) the lesser of (A) \$46.00 minus the 20-day VWAP of Invitrogen common stock and (B) \$2.31. If, however, the 20-day VWAP of Invitrogen common stock is less than \$43.69 per share, there will not be any cash paid in addition to the amount calculated as described above.

Since the market price of Invitrogen common stock will fluctuate, the total value of the stock consideration and therefore the value of the total merger consideration may increase or decrease between the date of the merger agreement and the effective time of the merger. The market price of the Invitrogen common stock at the time it is received by Applied Biosystems stockholders may be higher or lower than the final Invitrogen stock price or the market price of Invitrogen common stock on the date the merger was announced, on the date this document is mailed to Applied Biosystems stockholders, on the date an Applied Biosystems stockholder makes an election with respect to the merger consideration, or on the date of the Applied Biosystems special meeting of stockholders.

Upon completion of the transaction, Invitrogen stockholders immediately before the merger will own the majority of the outstanding shares of common stock of Invitrogen. Invitrogen stockholders will continue to own their existing shares of Invitrogen common stock, which will not be affected by the merger, except that, because Invitrogen will be issuing new shares of Invitrogen common stock to Applied Biosystems stockholders in the merger, each outstanding share of Invitrogen common stock immediately prior to the merger will, after the merger, represent a smaller percentage ownership interest in Invitrogen.

Table of Contents***Hypothetical Additional Cash Scenarios***

The information provided below illustrates the calculation of the additional cash amount, if any, that a stockholder electing to receive mixed consideration would be entitled to receive, assuming different 20-day VWAPs of Invitrogen common stock. The information is for illustrative purposes only and is not intended to be predictive or indicative of the future price of Invitrogen common stock or the potential payment, if any, of additional cash consideration to any Applied Biosystems stockholder who elects to receive all or a portion of the merger consideration in the form of Invitrogen common stock.

| | | | | | | | | | | | | | | | |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| IVGN Price | \$ 37.00 | \$ 38.00 | \$ 39.00 | \$ 40.00 | \$ 41.00 | \$ 42.00 | \$ 43.00 | \$ 43.69 | \$ 44.00 | \$ 44.50 | \$ 45.00 | \$ 45.50 | \$ 46.00 | \$ 47.00 | \$ 48.00 |
| Cash | \$ 18.15 | \$ 18.15 | \$ 18.15 | \$ 18.15 | \$ 18.15 | \$ 18.15 | \$ 18.15 | \$ 18.15 | \$ 18.01 | \$ 17.78 | \$ 17.56 | \$ 17.33 | \$ 17.10 | \$ 17.10 | \$ 17.10 |
| Stock Value Based on Fixed | | | | | | | | | | | | | | | |
| Exchange Ratio of 0.4543x | \$ 16.81 | \$ 17.26 | \$ 17.72 | \$ 18.17 | \$ 18.63 | \$ 19.08 | \$ 19.53 | \$ 19.85 | \$ 19.99 | \$ 20.22 | \$ 20.44 | \$ 20.67 | \$ 20.90 | \$ 21.35 | \$ 21.81 |
| Total Value to Applied | | | | | | | | | | | | | | | |
| Biosystems stockholder | \$ 34.96 | \$ 35.41 | \$ 35.87 | \$ 36.32 | \$ 36.78 | \$ 37.23 | \$ 37.68 | \$ 38.00 | \$ 38.00 | \$ 38.00 | \$ 38.00 | \$ 38.00 | \$ 38.00 | \$ 38.45 | \$ 38.91 |

Applied Biosystems Stockholder Elections

If you are an Applied Biosystems stockholder, you will be sent in a separate mailing an election form with instructions for making mixed consideration, cash consideration and stock consideration elections. You must properly complete and deliver to the exchange agent your election form along with your stock certificates (or a properly completed notice of guaranteed delivery) or, in the case of book-entry shares, any additional documents specified in the procedures set forth in the election form. Do not send your stock certificates or election form with your proxy card.

Election forms and stock certificates (or a properly completed notice of guaranteed delivery) or, in the case of book-entry shares, any additional documents specified in the procedures set forth in the election form must be received by the exchange agent by the election deadline, which is 5:00 p.m., New York City time, on either the date of the Applied Biosystems special meeting of stockholders or, if the closing date of the merger is more than four business days following the Applied Biosystems special meeting of stockholders, two business days before the closing date of the merger. Invitrogen and ABI will publicly announce the anticipated election deadline at least five business days before the anticipated closing date of the merger. Once you tender your stock certificates to the exchange agent, you may not transfer your shares of Applied Biosystems stock unless the merger agreement is terminated, unless you revoke your election by written notice to the exchange agent that is received prior to the election deadline.

If you fail to submit a properly completed election form, then your shares of Applied Biosystems stock will be exchanged for mixed consideration.

If you own shares of Applied Biosystems stock in street name through a broker or other nominee and you wish to make an election, you should seek instructions from the broker or other nominee holding your shares concerning how to make your election.

If the merger is not completed, any stock certificates received will be returned by the exchange agent by first class mail or through book-entry transfer (in the case of shares of Applied Biosystems stock delivered in book-entry form to the exchange agent).

Federal Income Tax

The merger is expected to qualify as a tax-free reorganization under Section 368(a) of the Internal Revenue Code. Accordingly, the merger is expected to be tax-free to Invitrogen stockholders, and to Applied Biosystems stockholders to the extent that they receive Invitrogen common stock pursuant to the merger.

Table of Contents

Approval of Invitrogen's Board of Directors

The board of directors of Invitrogen, or the Invitrogen Board, has unanimously approved and adopted the merger agreement and the transactions contemplated by it and unanimously recommends that Invitrogen stockholders vote at the Invitrogen special meeting of stockholders to approve the issuance of Invitrogen common stock pursuant to the merger agreement, as required by the listing requirements of NASDAQ, and to amend Invitrogen's restated certificate of incorporation to increase the number of authorized shares of common stock from 200,000,000 to 400,000,000. Approval of the proposal to approve the issuance of shares of Invitrogen common stock pursuant to the merger agreement is a condition to the completion of the merger, and approval of the proposal to amend Invitrogen's restated certificate of incorporation to increase the number of authorized shares is a condition to completion of the merger and is necessary for Invitrogen to issue the shares of Invitrogen common stock in the merger. In addition, the Invitrogen board of directors unanimously recommends that Invitrogen stockholders vote to approve a proposal to grant authority to the proxyholders to vote to adjourn the Invitrogen special meeting of stockholders, if necessary, to solicit additional proxies if there are not sufficient votes at the time of the Invitrogen special meeting of stockholders in favor of any or all of the foregoing proposals. Approval of the proposal to adjourn the Invitrogen special meeting of stockholders, if necessary, is not a condition to the completion of the merger.

Approval of ABI's Board of Directors

The board of directors of ABI has approved the merger agreement, declared the merger agreement advisable, determined that the merger agreement and the transactions contemplated by it are in the best interests of ABI and Applied Biosystems stockholders, and recommends that Applied Biosystems stockholders vote at the Applied Biosystems special meeting of stockholders to adopt the merger agreement and approve any adjournments of the special meeting, if necessary, to solicit additional proxies. See *The Merger Background of the Merger*. As described under the heading *The Merger Interests of ABI's Directors and Executive Officers in the Merger*, some of ABI's directors and executive officers may receive financial benefits as a result of the merger that are different from, or in addition to, those of Applied Biosystems stockholders generally.

Fractional Shares

Invitrogen will not issue fractional shares of Invitrogen common stock in the merger. As a result, an Applied Biosystems stockholder will receive cash for any fractional share of Invitrogen common stock that such stockholder would otherwise be entitled to receive in the merger. For a full description of the treatment of fractional shares, see *The Merger Agreement Fractional Shares*.

Equity Awards of ABI

Stock Options

Immediately prior to the completion of the merger, each outstanding unexpired and unexercised option to purchase or acquire shares of Applied Biosystems stock, whether or not vested or subject to any performance condition that has not been satisfied, will vest and become fully exercisable and converted into an option to purchase the number of shares of Invitrogen common stock equal to the product of 0.8261 (the exchange ratio of Applied Biosystems stock for Invitrogen common stock applicable to stockholders who elect to receive stock consideration in the merger) multiplied by the number of shares that were subject to the old Applied Biosystems option (rounded down to the nearest whole share), at an exercise price per share equal to the exercise price of the old option divided by the stock election exchange ratio of 0.8261 (rounded up to the nearest cent). In the event that there is a cash adjustment to the stock election and mixed election merger consideration because the 20-Day VWAP of the Invitrogen common stock is between \$43.69 and \$46.00, then the percentage of a share of Invitrogen common stock issuable upon exercise of an option will be increased to give option holders the benefit of the adjustment to the stock exchange ratio, and the exercise price of the option will be proportionately reduced.

Table of Contents

Restricted Stock

Each restricted share of Applied Biosystems stock, whether or not subject to any performance condition that has not been satisfied, will vest in full immediately prior to the closing of the merger and be converted in the merger into the right to receive the mixed consideration consisting of Invitrogen common stock and cash.

Restricted Stock Units

Each outstanding right to receive Applied Biosystems stock pursuant to a stock unit award which has not lapsed immediately prior to completion of the merger, whether or not subject to any performance condition that has not been satisfied, will become fully vested and settled in shares of Applied Biosystems stock and be converted in the merger into the right to receive the mixed consideration consisting of Invitrogen common stock and cash.

Stock Units

Immediately prior to the completion of the merger, each outstanding right to receive shares of Applied Biosystems stock that is held by a director who will not become a director of Invitrogen will be settled in shares of Applied Biosystems stock, and all such shares of Applied Biosystems stock will be converted in the merger into rights to receive stock consideration consisting of Invitrogen common stock.

For a full description of the treatment of ABI's equity-based incentive awards, see *The Merger Agreement Treatment of Equity Awards*.

Share Ownership of Directors and Executive Officers

At the close of business on the Invitrogen record date, directors and executive officers of Invitrogen and their affiliates beneficially owned and were entitled to vote approximately 342,569 shares of Invitrogen common stock, collectively, representing approximately 0.4% of the shares of Invitrogen common stock outstanding on that date.

At the close of business on the Applied Biosystems record date, directors and executive officers of ABI and their affiliates beneficially owned and were entitled to vote approximately 858,985 shares of Applied Biosystems stock, collectively, representing approximately 0.5% of the shares of stock outstanding on that date.

Opinions of Financial Advisors (see pages 56 and 65)

Invitrogen

In connection with the merger, Invitrogen's board of directors received separate written opinions, dated June 11, 2008, from Invitrogen's financial advisors, Moelis & Company LLC, which is referred to as Moelis, and UBS Securities LLC, which is referred to as UBS, as to the fairness, from a financial point of view and as of the date of such opinions, to Invitrogen of the merger consideration to be paid in the aggregate by Invitrogen. The full texts of the written opinions of Moelis and UBS, each dated June 11, 2008, are attached to this joint proxy statement/prospectus as Annex C and Annex D, respectively. **The opinions of Invitrogen's financial advisors were provided for the benefit of Invitrogen's board of directors in connection with, and for the purpose of, its evaluation of the merger consideration to be paid in the aggregate by Invitrogen from a financial point of view and do not address any other aspect of the merger. The opinions do not address the relative merits of the merger as compared to other business strategies or transactions that might be available to Invitrogen or Invitrogen's underlying business decision to effect the merger. The opinions do not**

Table of Contents

constitute a recommendation to any stockholder as to how to vote or act with respect to the merger. Holders of Invitrogen common stock are encouraged to read the opinions of Invitrogen's financial advisors carefully in their entirety for a description of the assumptions made, procedures followed, matters considered and limitations on the review undertaken by Invitrogen's financial advisors.

ABI

In connection with the Merger, ABI received written opinions from each of Morgan Stanley & Co. Incorporated, which is referred to as Morgan Stanley, and Greenhill & Co., LLC, which is referred to as Greenhill, as to the fairness of the consideration to be received by the holders of shares of Applied Biosystems stock pursuant to the merger agreement. On June 11, 2008, Morgan Stanley and Greenhill delivered to ABI's board of directors their respective oral opinions, each of which was subsequently confirmed by the delivery of a written opinion of the same date, to the effect that, as of June 11, 2008, and based upon and subject to the various assumptions made, procedures followed, factors considered, and limitations described in such opinion, the merger consideration to be received by the holders of shares of Applied Biosystems stock (other than, in the case of Morgan Stanley, Invitrogen, Atom Acquisition, or any subsidiary of ABI or, in the case of Greenhill, Invitrogen, Atom Acquisition, and their respective affiliates), as provided for in the merger agreement, was fair, from a financial point of view, to such holders.

The full text of the written opinion of Morgan Stanley, dated June 11, 2008, is attached to this joint proxy statement/prospectus as Annex E, and the full text of the written opinion of Greenhill, dated June 11, 2008, are attached to this joint proxy statement/prospectus as Annex F. You are encouraged to read each opinion carefully and in its entirety for a description of the assumptions made, procedures followed, factors considered, and limitations on the review undertaken. **The opinions of Morgan Stanley and Greenhill were provided to ABI's board of directors in connection with its consideration of the merger, were directed only to the fairness of the merger consideration from a financial point of view, do not address any other aspect of the merger, do not express an opinion as to what the value of Invitrogen common stock will be when issued pursuant to the merger agreement and do not constitute a recommendation to any stockholder as to how to vote, elect, or act with respect to the merger, the consideration, or any other matter relating to the merger.**

Ownership of Invitrogen after the Merger

In the merger, Invitrogen expects to issue approximately 80.2 million shares of Invitrogen common stock, based on shares of Applied Biosystems stock and Applied Biosystems' stock options, restricted stock, restricted stock units and stock units outstanding as of September 5, 2008, and assuming that all of the stock options outstanding as of such date remain outstanding as of the effective time of the merger. Applied Biosystems stockholders are expected to own approximately 45% of the shares of Invitrogen common stock outstanding after the merger.

Interests of Invitrogen's Directors and Executive Officers in the Merger (see page 89)

In considering the recommendation of the Invitrogen board of directors, Invitrogen stockholders should be aware that Invitrogen's directors and executive officers have interests in the merger and have arrangements that may be different from, or in addition to, Invitrogen stockholders generally. These interests and arrangements may create potential conflicts of interest and include change-in-control arrangements that provide for, among other things, severance payments and benefits in the event of certain qualifying terminations of employment in connection with or following the merger.

Table of Contents

Interests of ABI's Directors and Executive Officers in the Merger (see page 89)

In considering the recommendation of ABI's board of directors, Applied Biosystems stockholders should be aware that ABI's directors and executive officers have interests in the merger and have arrangements that may be different from, or in addition to, those of Applied Biosystems stockholders generally. These interests and arrangements may create potential conflicts of interest.

These interests and arrangements include:

change-in-control severance agreements with ABI's current executive officers that provide for, among other things, severance benefits in the event of certain qualifying terminations of employment in connection with or following the merger;

vesting of all unvested equity awards, including those held by ABI's directors and executive officers;

vesting and conversion into Applied Biosystems stock of all unvested restricted stock units;

accelerated payment of awards under ABI's Performance Unit Bonus Plan;

continued service on Invitrogen's board of directors by three of ABI's directors and the appointment of Mark P. Stevenson as President and Chief Operating Officer of Invitrogen; and

continued indemnification and insurance coverage as required under the merger agreement.

Management of Invitrogen after the Merger

At the effective time of the merger, the board of directors of Invitrogen will cause the number of directors that will constitute the entire board of directors of Invitrogen immediately following the effective time of the merger to be increased from nine to twelve. It is currently expected that each of the current members of the Invitrogen Board will continue to serve on the Invitrogen Board following the closing of the merger and that at the effective time of the merger, three former directors of ABI mutually agreed upon by Invitrogen and ABI will be appointed to serve as directors of Invitrogen. The three former directors of ABI will each be placed in a different class of the board of directors of Invitrogen. On or prior to the effective time of the merger, Invitrogen will appoint Mark P. Stevenson, currently the President and Chief Operating Officer of ABI, as the President and Chief Operating Officer of Invitrogen.

Invitrogen Name Change

At the time of the merger, Invitrogen will (1) form a Delaware corporation, all of the outstanding shares of capital stock of which will be owned by Invitrogen, and (2) merge such subsidiary with and into Invitrogen, with Invitrogen surviving, for the sole purpose of changing the name of Invitrogen to Applied Biosystems Inc. or another name mutually acceptable to Invitrogen and ABI to be selected prior to the time of the merger.

Listing of Invitrogen Common Stock (see page 84) and Delisting and Deregistration of Applied Biosystems Stock (see page 88)

Application will be made to have the shares of Invitrogen common stock to be issued in the merger approved for listing on the NASDAQ Global Select Market, where Invitrogen common stock currently is traded under the symbol IVGN.

Upon completion of the merger, Applied Biosystems stock will no longer be listed on the NYSE and will be deregistered under the Exchange Act, and ABI will no longer file reports with the SEC.

Table of Contents

Appraisal Rights (see page 84)

Invitrogen

Under Delaware law, holders of Invitrogen common stock are not entitled to appraisal rights in connection with the issuance of Invitrogen common stock in the merger.

ABI

Holders of Applied Biosystems stock who do not wish to accept the consideration payable pursuant to the merger may seek, under Section 262 of the DGCL, judicial appraisal of the fair value of their shares by the Delaware Court of Chancery. This value could be more than, less than or the same as the merger consideration for Applied Biosystems stock. Failure to strictly comply with all the procedures required by Section 262 of the DGCL, including, without limitation, the requirement that stockholders who wish to seek appraisal rights not vote for the proposal to adopt the merger agreement and approve the merger, will result in a loss of the right of appraisal.

Merely not voting for the merger will not preserve the right of Applied Biosystems stockholders to appraisal of their shares of Applied Biosystems stock under Delaware law. Applied Biosystems stockholders who desire to exercise their appraisal rights must submit a written demand for an appraisal before the vote on the adoption of the merger agreement and approval of the merger and must continue to hold their shares of Applied Biosystems stock through the effective time of the merger. Applied Biosystems stockholders must also comply with other procedures as required by the DGCL. Applied Biosystems stockholders who validly demand appraisal of their shares in accordance with the DGCL and do not withdraw their demand or otherwise forfeit their appraisal rights will not receive the merger consideration. Instead, after completion of the proposed merger, the Court of Chancery of the State of Delaware will determine the fair value of their shares exclusive of any element of value arising from the proposed merger. This appraisal amount will be paid in cash and could be more than, the same as or less than the amount of an Applied Biosystems stockholder would be entitled to receive under the terms of the merger agreement. Applied Biosystems stockholders who hold shares in the name of a broker or other nominee and desire to exercise their appraisal rights must instruct their nominees to take the steps necessary to enable them to demand appraisal for their shares.

Annex H to this joint proxy statement/prospectus contains the full text of Section 262 of the DGCL, which describes the rights of appraisal and related requirements. Invitrogen and ABI encourage you to read these provisions carefully and in their entirety. Any holder of Applied Biosystems stock who wishes to exercise appraisal rights or who wishes to preserve such holder's right to do so, should review the discussion under the caption *The Merger Appraisal Rights* and Annex H carefully because failure to timely and properly comply with the procedures specified will result in the loss of appraisal rights. Moreover, because of the complexity of the procedures for exercising the right to seek appraisal, Applied Biosystems stockholders who are considering exercising such rights are encouraged to seek the advice of legal counsel.

Conditions to Completion of the Merger (see page 124)

A number of conditions to each party's obligation to close must be satisfied before the merger will be completed. These include among others:

the adoption of the merger agreement and approval of the merger by Applied Biosystems stockholders and the approval by Invitrogen stockholders of (1) the issuance of Invitrogen common stock to Applied Biosystems stockholders in the merger, and (2) an amendment to the restated certificate of incorporation of Invitrogen to increase the number of authorized shares of common stock from 200,000,000 to 400,000,000;

Table of Contents

the expiration or termination of the applicable waiting period and any extension of the waiting period under the HSR Act, which, together with the rules and regulations promulgated thereunder, is referred to as the HSR Act, the statutory waiting period under which expired at 11:59 p.m. on July 28, 2008, and the ECMR as well as the approval of competition regulatory authorities in several other countries;

the absence of any legal prohibition having the effect of preventing or prohibiting completion of the merger which prohibition continues to be in effect;

the effectiveness, under the Securities Act of the registration statement of which this joint proxy statement/prospectus is a part and the absence of any stop order having been issued and remaining in effect;

the approval for listing on the NASDAQ Global Select Market of the shares of Invitrogen common stock issuable in the merger and to be reserved for issuance upon the exercise, vesting or payment under any ABI stock option that has been converted into the right to purchase such number of shares of Invitrogen common stock pursuant to the terms of the merger agreement;

the accuracy and correctness of the representations and warranties of the other party, subject to certain qualifications described in the merger agreement;

the other party having performed and complied with its covenants in the merger agreement in all material respects prior to the effective time of the merger, and the receipt of a certificate from an officer of the other party to that effect; and

the receipt by each party of an opinion from that party's counsel substantially to the effect that the merger will be treated as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code and that Invitrogen and ABI will each be treated as a party to the reorganization within the meaning of Section 368(b) of the Internal Revenue Code.

The financing commitments secured by Invitrogen stipulate that no waiver of the conditions to the performance of obligations under the merger agreement that is materially adverse to the lenders under those financing commitments can be made without the consent of those lenders. Notwithstanding those financing commitments, to the extent permitted by law, either Invitrogen or ABI may waive the conditions to the performance of its obligations under the merger agreement and complete the merger even though one or more of these conditions has not been met. Neither Invitrogen nor ABI can give any assurance that all of the conditions to the merger will be either satisfied or waived or that the merger will occur.

Regulatory Approvals (see page 84)

The notifications required under the HSR Act to the United States Federal Trade Commission, which is referred to as the FTC, and the Antitrust Division of the United States Department of Justice, which is referred to as the DOJ, were filed on June 26, 2008 by both Invitrogen and ABI, and the statutory waiting period under the HSR Act expired at 11:59 p.m. on Monday, July 28, 2008. The transaction is also subject to the expiration or termination of the applicable waiting period under the ECMR as well as the approval of competition regulatory authorities in several other countries.

Financing Commitments (see page 97)

Invitrogen entered into a commitment letter with Bank of America, N.A., or Bank of America, Banc of America Securities LLC, or BAS, UBS Loan Finance LLC, or UBS Finance, UBS, and Morgan Stanley Senior Funding, Inc., or MSSF, pursuant to which certain of these financial institutions will act as the initial lenders under senior secured credit facilities, in an aggregate amount of \$2.65 billion, consisting of a revolving credit

Table of Contents

facility of \$250 million and term facilities aggregating \$2.4 billion, or the Credit Facilities. For a full description of the financing commitments, see The Merger Financing Commitments.

No Solicitation by Invitrogen or ABI (see page 118)

Subject to exceptions, the merger agreement precludes Invitrogen and ABI from soliciting or engaging in discussions or negotiations with a third party with respect to a proposal to acquire a significant interest in Invitrogen's or ABI's equity or assets. Notwithstanding such restrictions, the merger agreement provides that, under specified circumstances and prior to approval by its stockholders, if ABI receives an unsolicited proposal from a third party to acquire a significant interest in it that is determined to be a proposal that is superior to the merger agreement, or in the good faith determination of ABI's board of directors, is reasonably likely to become a superior proposal, and ABI's board of directors concludes in good faith that the failure to take such action would be inconsistent with its fiduciary duties under applicable law, ABI may furnish nonpublic information to that third party and engage in negotiations regarding an acquisition proposal with that third party.

Termination of the Merger Agreement (see page 125)

Invitrogen and ABI may mutually agree in writing by action of their respective boards of directors, at any time before the effective time of the merger, to abandon the merger and terminate the merger agreement. Also, either Invitrogen or ABI may terminate the merger agreement in certain circumstances, including if:

the merger is not consummated by March 11, 2009, unless that date is extended to June 11, 2009, on the terms provided in the merger agreement, which date, as it may be extended, is referred to as the outside date;

Applied Biosystems stockholders fail to adopt the merger agreement and approve the merger at the Applied Biosystems special meeting of stockholders;

Invitrogen stockholders fail to approve, at the Invitrogen special meeting of stockholders, the issuance of shares of Invitrogen common stock in the merger and the amendment to the restated certificate of incorporation to increase the authorized number of shares of common stock from 200,000,000 to 400,000,000; or

any governmental entity prohibits the merger and that prohibition has become final and nonappealable, except that the party seeking to terminate the merger agreement must have used its commercially reasonable efforts to remove the prohibition.

Invitrogen also may terminate the merger agreement if:

ABI breaches any representation, warranty, covenant or agreement made by ABI in the merger agreement or any representation and warranty made by ABI has become untrue after the execution of the merger agreement, in each case, so that such breach would give rise to the failure of a closing condition regarding the accuracy of ABI's representations and warranties or ABI's compliance with its covenants and agreements and such breach or failure to be true is not cured within 30 days of receipt of notice from Invitrogen; or

prior to the Applied Biosystems special meeting of stockholders, ABI's board of directors or a committee thereof (1) fails to call or hold the Applied Biosystems special meeting of stockholders, (2) fails to include in this joint proxy statement/prospectus its recommendation that Applied Biosystems stockholders adopt and approve the merger agreement and the merger, or (3) withdraws, modifies or changes its recommendation to Applied Biosystems stockholders, in a manner adverse to Invitrogen, or approves or recommends an alternative transaction.

Table of Contents

ABI also may terminate the merger agreement if:

Invitrogen breaches any representation, warranty, covenant or agreement made by Invitrogen in the merger agreement or any representation and warranty made by Invitrogen has become untrue after the execution of the merger agreement, in each case, so that such breach would give rise to the failure of a closing condition regarding the accuracy of the Invitrogen's representations and warranties or Invitrogen's compliance with its covenants and agreements and such breach or failure to be true is not cured within 30 days of receipt of notice from ABI;

prior to the Applied Biosystems special meeting of stockholders, ABI receives an unsolicited bona fide written acquisition proposal (other than the merger agreement and the merger) in compliance with the applicable provisions of the merger agreement that ABI's board of directors has determined in good faith is a superior proposal, ABI's board of directors has determined in good faith that the failure to take such action would be inconsistent with its fiduciary duties under applicable law, and ABI has complied with its obligations set forth in the merger agreement with respect to acquisition proposals; or

prior to the Invitrogen special meeting of stockholders, the Invitrogen Board or a committee thereof (1) fails to call or hold the Invitrogen special meeting of stockholders, (2) fails to include in this joint proxy statement/prospectus its recommendation that the stockholders approve the issuance of Invitrogen common stock in order to consummate the merger, or (3) withdraws, modifies or changes its recommendation to the stockholders of Invitrogen in favor of the stock issuance, the increase in the number of authorized shares of Invitrogen common stock in a manner adverse to ABI.

Termination Fee (see page 126)

Upon termination of the merger agreement under certain specified circumstances, Invitrogen or ABI would be required to pay the other a termination fee of \$150 million.

Material U.S. Federal Income Tax Consequences of the Merger (see page 130)

It is a condition to the closing of the merger that DLA Piper LLP (US) and Skadden, Arps, Slate, Meagher & Flom LLP deliver opinions, effective as of the date of closing, to Invitrogen and ABI, respectively, substantially to the effect that (1) the merger will be treated for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code and (2) Invitrogen and ABI will each be treated as a party to the reorganization within the meaning of Section 368(b) of the Internal Revenue Code.

Please review carefully the information under the caption "Material U.S. Federal Income Tax Consequences of the Merger" for a description of the material U.S. federal income tax consequences of the merger. The tax consequences to you will depend on your own situation. Please consult your tax advisors for a full understanding of the tax consequences of the merger to you.

Accounting Treatment (see page 84)

Invitrogen will account for the merger using the purchase method of accounting for business combinations under United States generally accepted accounting principles, which is referred to as GAAP.

Table of Contents

Risk Factors (see page 28)

In evaluating the merger, the merger agreement or the issuance of shares of Invitrogen common stock in the merger, you should carefully read this joint proxy statement/prospectus and especially consider the factors discussed in the section entitled Risk Factors. These risks include possible difficulties in combining two companies that have previously operated independently.

Comparison of Stockholder Rights and Corporate Governance Matters (see page 145)

Applied Biosystems stockholders receiving merger consideration will have different rights once they become Invitrogen stockholders because of differences between the governing documents of Invitrogen and ABI. These differences are described in detail under Comparison of Stockholder Rights and Corporate Governance Matters.

Fees and Expenses (see page 127)

Generally, all fees and expenses incurred in connection with the merger agreement and the transactions contemplated by the merger agreement will be paid by the party incurring those expenses, subject to the specific exceptions discussed in this joint proxy statement/prospectus.

Table of Contents**Summary Selected Historical Financial Data****Invitrogen Corporation**

The following table sets forth Invitrogen's selected historical financial data that has been derived from audited annual financial statements, including the consolidated balance sheets as of December 31, 2007, 2006, 2005, 2004 and 2003 and the related consolidated statements of operations for each of the five years in the period ended December 31, 2007 and notes thereto. The data for the six months ended June 30, 2008 and 2007 has been derived from unaudited financial statements also incorporated by reference and which, in the opinion of management, include all adjustments, consisting of normal recurring adjustments, necessary for a fair statement of the results of the unaudited interim periods. There were no cash dividends declared during any period presented. You should read this financial information in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations in Invitrogen's Annual Report on Form 10-K for the year ended December 31, 2007 and Quarterly Report on Form 10-Q for the quarter ended June 30, 2008 and Invitrogen's consolidated financial statements and notes thereto incorporated by reference in this document.

| (in thousands, except per share data) | Six Months Ended June 30, | | | Year Ended December 31, | | | |
|--|------------------------------|---------------------|---------------------|-------------------------|-----------------------|---------------------|-----------------------|
| | 2008 ⁽¹⁾ | 2007 ⁽¹⁾ | 2007 ⁽¹⁾ | 2006 ^(1,2) | 2005 ^(1,3) | 2004 ⁽¹⁾ | 2003 ^(1,4) |
| Statement of Operations Data: | | | | | | | |
| Revenues | \$ 718,009 | \$ 630,343 | \$ 1,281,747 | \$ 1,151,175 | \$ 1,079,137 | \$ 911,558 | \$ 777,738 |
| Gross profit | \$ 443,867 | \$ 346,876 | \$ 715,887 | \$ 608,331 | \$ 549,535 | \$ 464,207 | \$ 389,976 |
| Net income from continuing operations | \$ 111,595 | \$ 59,289 | \$ 130,279 | \$ 75,759 | \$ 121,485 | \$ 80,987 | \$ 60,130 |
| Net income (loss) from discontinued operations | \$ 1,358 | \$ 11,855 | \$ 12,911 | \$ (266,808) | \$ 10,561 | \$ 7,838 | \$ |
| Net income (loss) | \$ 112,953 | \$ 71,144 | \$ 143,190 | \$ (191,049) | \$ 132,046 | \$ 88,825 | \$ 60,130 |
| Income from continuing operations per common share: | | | | | | | |
| Basic | \$ 1.21 | \$ 0.63 | \$ 1.39 | \$ 0.74 | \$ 1.16 | \$ 0.78 | \$ 0.60 |
| Diluted | \$ 1.15 | \$ 0.62 | \$ 1.35 | \$ 0.72 | \$ 1.08 | \$ 0.75 | \$ 0.59 |
| Income (loss) from discontinued operations per common share: | | | | | | | |
| Basic | \$ 0.01 | \$ 0.13 | \$ 0.14 | \$ (2.60) | \$ 0.10 | \$ 0.08 | \$ |
| Diluted | \$ 0.01 | \$ 0.12 | \$ 0.13 | \$ (2.52) | \$ 0.09 | \$ 0.06 | \$ |
| Net income (loss) per share: | | | | | | | |
| Basic | \$ 1.22 | \$ 0.76 | \$ 1.53 | \$ (1.86) | \$ 1.26 | \$ 0.86 | \$ 0.60 |
| Diluted | \$ 1.16 | \$ 0.74 | \$ 1.48 | \$ (1.80) | \$ 1.17 | \$ 0.81 | \$ 0.59 |
| Balance Sheet Data: | | | | | | | |
| Current assets | \$ 1,129,885 | \$ 988,587 | \$ 1,090,484 | \$ 740,604 | \$ 1,079,234 | \$ 1,265,104 | \$ 1,287,344 |
| Noncurrent assets | \$ 2,296,974 | \$ 2,160,544 | \$ 2,239,263 | \$ 2,179,696 | \$ 2,241,376 | \$ 1,794,370 | \$ 1,878,345 |
| Current liabilities (including convertible debt) | \$ 231,609 | \$ 212,386 | \$ 234,413 | \$ 228,086 | \$ 468,148 | \$ 168,791 | \$ 125,693 |
| Noncurrent liabilities (including convertible debt) | \$ 1,314,717 | \$ 1,304,629 | \$ 1,327,381 | \$ 1,296,191 | \$ 1,310,941 | \$ 1,476,523 | \$ 1,233,149 |
| Total stockholders' equity | \$ 1,880,533 | \$ 1,632,116 | \$ 1,765,447 | \$ 1,630,427 | \$ 2,041,790 | \$ 1,913,251 | \$ 1,806,847 |

On April 30, 2008, Invitrogen announced a two-for-one stock split in the form of a 100% stock dividend with a record date of May 16, 2008, and a distribution date of May 27, 2008. Share and per share amounts have been restated to reflect the stock split for all periods presented.

- (1) During 2007, 2006, 2005, 2004 and 2003, Invitrogen completed acquisitions that were not material and their results of operations have been included in the consolidated financial statements from their respective dates of acquisition. See Note 2 to the Notes to Consolidated Financial Statements in Invitrogen's Annual Report on Form 10-K for the year ended December 31, 2007.
- (2) In 2006, the FASB issued Financial Accounting Standard 123 revised "Share Based Payments" in which share based payment is included in the results of operations and impacts the net income as reported. This adoption affects comparability between the Summary Selected Financial Data. See Note 1 to the Notes to Consolidated Financial Statements in Invitrogen's Annual Report on Form 10-K for the year ended December 31, 2007.
- (3) Includes the results of operations of Dynal Biotech Holding from April 1, 2005, the date of acquisition, which affects the comparability of the Summary Selected Financial Data.
- (4) Includes the results of operations of the PanVera business and Molecular Probes, Inc. from March 28, 2003 and August 20, 2003, the respective dates of acquisitions, which affect the comparability of the Summary Selected Financial Data.

Table of Contents**ABI**

The following summary contains historical consolidated financial data for each of the last five fiscal years ended June 30 and has been derived from ABI's audited consolidated financial statements. Those financial statements have been audited by PricewaterhouseCoopers LLP, ABI's independent registered public accounting firm. The information in this table is in accordance with accounting principles generally accepted in the United States, or GAAP, consistently applied, except for the provisions of SFAS 123R, which were adopted as of July 1, 2005.

| (in thousands, except per share data) | Twelve Months Ended June 30, | | | | |
|---|------------------------------|-------------------|-------------------|-------------------|-------------------|
| | 2008 | 2007 | 2006 | 2005 | 2004 |
| Statement of Operations Data: | | | | | |
| Revenue | \$ 2,361,484 | \$ 2,132,493 | \$ 1,949,390 | \$ 1,845,140 | \$ 1,825,193 |
| Cost of revenues | 999,130 | 951,472 | 881,238 | 848,659 | 849,979 |
| Purchased intangibles amortization | 17,561 | 11,264 | 5,916 | 4,237 | 7,519 |
| Gross profit | 1,344,793 | 1,169,757 | 1,062,236 | 992,244 | 967,695 |
| Operating expenses: | | | | | |
| Sales and marketing | 443,044 | 389,277 | 344,170 | 305,131 | 282,786 |
| General and administrative | 270,983 | 233,415 | 240,313 | 220,246 | 229,452 |
| Research and development | 235,230 | 253,971 | 271,359 | 330,603 | 351,620 |
| Purchased in process research and development | | 114,251 | 3,400 | | |
| Employee-related charges, asset impairments and other | 27,281 | 10,342 | 26,547 | 34,376 | 41,824 |
| Asset dispositions and legal settlements | (8,656) | (4,585) | 11,221 | (38,172) | (6,660) |
| Total operating expenses | 967,882 | 996,671 | 897,010 | 852,184 | 899,022 |
| Operating income | 376,911 | 173,086 | 165,226 | 140,060 | 68,673 |
| Other income (expense): | | | | | |
| Interest income | 34,698 | 44,076 | 37,714 | 29,140 | 23,137 |
| Interest expense | (8,366) | (904) | (656) | (280) | (300) |
| Other income (expense), net | 27,892 | 6,964 | 12,970 | 4,423 | 37,977 |
| Total other income, net | 54,224 | 50,136 | 50,028 | 33,283 | 60,814 |
| Income before provision for income taxes | 431,135 | 223,222 | 215,254 | 173,343 | 129,487 |
| Income tax (provision) benefit | (217,327) | (72,451) | (2,762) | (13,548) | (14,534) |
| Net income from continuing operations | \$ 213,808 | \$ 150,771 | \$ 212,492 | \$ 159,795 | \$ 114,953 |
| Net income (loss) from discontinued operations (net) | | 8,529 | | | 10,628 |
| Net income | \$ 213,808 | \$ 159,300 | \$ 212,492 | \$ 159,795 | \$ 125,581 |
| Applied Biosystems Group | | | | | |
| Income from Continuing Operations per Share | | | | | |
| Basic | \$ 1.83 | \$ 0.93 | \$ 1.47 | \$ 1.21 | \$ 0.84 |
| Diluted | \$ 1.78 | \$ 0.90 | \$ 1.43 | \$ 1.19 | \$ 0.83 |
| Income (loss) from Discontinued Operations per Share | | | | | |
| Basic | \$ | \$ 0.05 | \$ | \$ | \$ 0.05 |
| Diluted | \$ | \$ 0.04 | \$ | \$ | \$ 0.05 |
| Net Income per Share | | | | | |
| Basic | \$ 1.83 | \$ 0.98 | \$ 1.47 | \$ 1.21 | \$ 0.89 |
| Diluted | \$ 1.78 | \$ 0.94 | \$ 1.43 | \$ 1.19 | \$ 0.88 |
| Celera Group | | | | | |
| Net Loss per Share | | | | | |
| Basic and diluted | \$ (1.29) | \$ (0.25) | \$ (0.83) | \$ (1.05) | \$ (0.79) |

Edgar Filing: INVITROGEN CORP - Form S-4/A

Balance Sheet Data:

| | | | | | |
|----------------------------|--------------|--------------|--------------|--------------|--------------|
| Current assets | \$ 1,717,291 | \$ 1,828,627 | \$ 1,618,858 | \$ 2,083,427 | \$ 1,923,408 |
| Noncurrent assets | \$ 1,344,100 | \$ 1,323,913 | \$ 1,394,117 | \$ 1,080,758 | \$ 1,049,443 |
| Current liabilities | \$ 753,108 | \$ 623,174 | \$ 608,290 | \$ 592,671 | \$ 596,768 |
| Noncurrent liabilities | \$ 243,809 | \$ 213,312 | \$ 200,351 | \$ 227,431 | \$ 195,034 |
| Total stockholder s equity | \$ 2,064,474 | \$ 2,316,054 | \$ 2,204,334 | \$ 2,344,083 | \$ 2,181,049 |

Table of Contents

Selected Unaudited Pro Forma Condensed Combined Financial Information

The following selected unaudited pro forma condensed combined balance sheet information as of June 30, 2008 and the selected unaudited pro forma condensed combined statements of operations information for the year ended December 31, 2007 and the six months ended June 30, 2008 are based on the separate historical consolidated financial statements of Invitrogen and ABI, and reflect the merger and related events, including the separation of the Celera business group of ABI, and apply the assumptions and adjustments described in the notes to the unaudited pro forma condensed combined financial statements included in Annex I. The selected unaudited pro forma condensed combined balance sheet information as of June 30, 2008 give effect to the merger and related events, including the Celera separation, as if they had been consummated on June 30, 2008. The selected unaudited pro forma condensed combined statement of earnings information for the year ended December 31, 2007 and the six months ended June 30, 2008 give effect to the merger and related events, including the Celera separation, as if they had been consummated on January 1, 2007, the beginning of Invitrogen's fiscal year.

The pro forma information is preliminary, is being furnished solely for informational purposes and is not necessarily indicative of the combined financial position or results of operations that might have been achieved for the periods or dates indicated, nor is it necessarily indicative of the future results of the combined company. The pro forma information is based on preliminary estimates and assumptions set forth in the notes to the unaudited pro forma condensed combined financial statements included in Annex I. The pro forma information does not reflect cost savings expected to be realized from the elimination of certain expenses and from synergies expected to be created or the costs to achieve such cost savings or synergies. No assurance can be given that cost savings or synergies will be realized. Income taxes do not reflect the amounts that would have resulted had Invitrogen and ABI filed consolidated income tax returns during the periods presented.

Pro forma adjustments are necessary to reflect the estimated purchase price, including the new debt and equity structure, and to adjust ABI's net tangible and intangible assets and liabilities to preliminary estimated fair values. Pro forma adjustments are also necessary to reflect the amortization expense related to amortizable intangible assets, changes in depreciation and amortization expense resulting from fair value adjustments to net tangible assets, costs to finance the merger and the income tax effects related to the pro forma adjustments.

The pro forma adjustments to ABI's assets and liabilities and allocation of purchase price are preliminary and are based on Invitrogen's management's estimates of the fair value of the assets to be acquired and liabilities to be assumed. Preliminary work performed by independent valuation specialists and discussions with ABI management has been considered in Invitrogen's management's estimates of the fair values reflected in the unaudited pro forma condensed combined financial statements.

The final purchase price allocation will be completed after asset and liability valuations are finalized. A final determination of these fair values, which cannot be made prior to the completion of the transaction, will include Invitrogen's and ABI's management's consideration of a final valuation that will be prepared by independent valuation specialists. This final valuation will be based on the actual net tangible and intangible assets of ABI that exist as of the effective date of the merger. Any final adjustments may change the allocation of purchase price, which could affect the fair value assigned to the assets and liabilities and could result in a change to the unaudited pro forma condensed combined financial statements presented herein. Amounts preliminarily allocated to and the estimated useful lives of intangible assets with indefinite and definite lives may change significantly, which could result in a material increase or decrease in amortization of definite lived intangible assets. Estimates related to the determination of the lives of assets acquired may also change, which could result in a material increase or decrease in depreciation or amortization expense.

Table of Contents

| | Six Months Ended June 30, 2008 (in millions, except per share amounts) | Year Ended December 31, 2007 |
|--|---|---------------------------------|
| Pro Forma Statement of Earnings Data: | | |
| Revenues | \$ 1,870.7 | \$ 3,419.8 |
| Operating Income | 203.5 | 280.2 |
| Net Income | 133.5 | 123.7 |
| Net income per share of common stock: | | |
| Basic | \$ 0.77 | \$ 0.71 |
| Diluted | \$ 0.75 | \$ 0.70 |

| | At June 30, 2008 (in millions) |
|--------------------------------------|--|
| Pro Forma Balance Sheet Data: | |
| Current assets | \$ 1,654.5 |
| Total assets | 11,274.2 |
| Current liabilities | 945.1 |
| Long-term debt | 3,551.0 |
| Total stockholders' equity | 5,286.5 |

Unaudited Comparative Per Share Information

The following table summarizes unaudited per share information for Invitrogen and ABI on a historical basis, on an unaudited pro forma combined basis for Invitrogen, taking into account the pro forma effects of the merger and related events, and on an equivalent pro forma combined basis for ABI. It has been assumed for purposes of the pro forma financial information provided below that the merger and related events had been consummated on January 1, 2007 for income statement purposes, and on June 30, 2008 for balance sheet purposes.

The following information should be read together with the audited consolidated financial statements of Invitrogen as of and for the fiscal year ended December 31, 2007 which are incorporated by reference into this joint proxy statement/prospectus, the unaudited consolidated financial statements of Invitrogen as of and for the six-month period ended June 30, 2008, which are also incorporated by reference into this joint proxy statement/prospectus, the audited consolidated financial statements of ABI as of and for the fiscal year ended June 30, 2008 which are incorporated by reference into this joint proxy statement/prospectus, and the unaudited pro forma condensed combined financial information as of and for the fiscal year ended December 31, 2007 and as of and for the six-month period ended June 30, 2008 set forth in Annex I to this joint proxy statement/prospectus. The unaudited pro forma per share information below is presented for illustrative purposes only and is not necessarily indicative of the operating results or financial position that would have occurred if the acquisition had been completed on January 1, 2007 for statement of operations purposes and on June 30, 2008 for balance sheet purposes, nor is it necessarily indicative of the future operating results or financial position of the combined company.

Table of Contents

The historical book value per share is computed by dividing total stockholders' equity by the number of shares of common stock outstanding at the end of the period. The pro forma per share income of the combined company is computed by dividing the pro forma total income of the combined company by the pro forma weighted-average number of shares of common stock of the combined company outstanding over the period. The pro forma combined book value per share is computed by dividing total pro forma stockholders' equity of the combined company by the pro forma number of shares of common stock of the combined company outstanding at the end of the period. ABI equivalent pro forma combined per share amounts are calculated by multiplying the pro forma combined per share amounts by 0.4543, the fraction of a share of Invitrogen common stock that would be exchanged for each share of Applied Biosystems stock in the acquisition for the mixed consideration. The ABI equivalent per share amounts do not include the benefits of the cash portion of the acquisition consideration. There were no cash dividends declared on Invitrogen common stock during any period presented. ABI declared a dividend of \$0.0425 per share per quarter during each period presented.

| Invitrogen | Six Months Ended June 30, 2008 | Year Ended December 31, 2007 |
|---|---|---|
| Historical data per share of Invitrogen common stock | | |
| Continued operations net earnings: | | |
| Basic | \$ 1.21 | \$ 1.39 |
| Diluted | \$ 1.15 | \$ 1.35 |
| Discontinued operations net earnings: | | |
| Basic | \$ 0.01 | \$ 0.14 |
| Diluted | \$ 0.01 | \$ 0.13 |
| Book value | \$ 20.42 | \$ 18.91 |
| Pro forma combined data per share of Invitrogen common stock | | |
| Pro forma earnings: | | |
| Basic | \$ 0.77 | \$ 0.71 |
| Diluted | \$ 0.75 | \$ 0.70 |
| Pro forma book value | \$ 30.68 | \$ 28.57 |

| ABI | Six Months Ended June 30, 2008 | Year Ended December 31, 2007 |
|--|---|---|
| Historical data per share of Applied Biosystems stock | | |
| Net earnings: | | |
| Basic | \$ 0.46 | \$ 1.65 |
| Diluted | \$ 0.45 | \$ 1.59 |
| Book value | \$ 8.06 | \$ 6.57 |
| Cash dividends declared | \$ 0.08 | \$ 0.17 |

Dividends

Invitrogen has never declared or paid any cash dividends on its common stock and currently does not anticipate paying such cash dividends. It currently anticipates that it will retain all of its future earnings for use in the development and expansion of its business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of its board of directors and will depend upon the results of operations, financial conditions, tax laws and other factors as the board of directors, in its direction, deems relevant. Additionally, in connection with a loan facility entered into in January 2006 with Bank of America, Invitrogen agreed to certain financial covenants that may, in certain circumstances, restrict its ability to pay dividends. Covenants that Invitrogen expects to be included in the Credit Facilities, which will be used to finance the merger, will likely restrict Invitrogen's ability to pay dividends. In addition, Invitrogen will be required to comply with financial covenants contained in the Credit Facilities that may have the effect of limiting its ability to pay dividends.

ABI has declared a dividend of \$0.0425 per share per quarter for each of the eight quarters ended June 30, 2008. ABI currently expects to declare and pay its regular quarterly dividend of \$0.0425 per share of Applied Biosystems stock through the completion of the merger.

Table of Contents**RISK FACTORS**

The merger involves risks for Invitrogen stockholders and Applied Biosystems stockholders. Holders of Applied Biosystems stock who vote in favor of the merger and elect to receive mixed consideration or stock consideration will be choosing to invest in Invitrogen common stock. Applied Biosystems stockholders who vote in favor of the merger and elect to receive only cash cannot be assured that they will not receive a portion of their consideration in Invitrogen common stock. Invitrogen stockholders will be choosing to permit significant dilution of their percentage ownership in Invitrogen by voting in favor of the issuance of stock in order to complete the merger. Invitrogen also will increase substantially the amount of its debt, which could have various adverse consequences to Invitrogen and the interests of Invitrogen's stockholders. In addition to the other information included in this joint proxy statement/prospectus, including the matters addressed in

*Cautionary Statement Concerning Forward-Looking Statements, you should carefully consider the following risks before deciding whether to vote for adoption of the merger agreement and approval of the merger in the case of Applied Biosystems stockholders, or for approval of the issuance of shares of Invitrogen common stock pursuant to the merger agreement and for the amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized shares of Invitrogen common stock, in the case of Invitrogen stockholders. In addition, you should read and consider the risks associated with each of the businesses of Invitrogen and ABI because these risks will also affect the combined company. These risks can be found in the Invitrogen Annual Report on Form 10-K for the fiscal year ended December 31, 2007 and Quarterly Report on Form 10-Q for the quarterly period ending June 30, 2008 and ABI's Annual Report on Form 10-K, for the fiscal year ended June 30, 2008, each of which is filed with the SEC and incorporated by reference into this joint proxy statement/prospectus. You should also read and consider the other information in this joint proxy statement/prospectus and the other documents incorporated by reference in this joint proxy statement/prospectus. See *Additional Information Where You Can Find More Information.**

Risks Related to the Merger

Invitrogen and ABI may not realize all of the anticipated benefits of the transaction.

To be successful after the merger, Invitrogen and ABI will need to combine and integrate the operations of their separate companies. The combination of two independent companies is a complex, costly and time-consuming process. As a result, the combined company will be required to devote significant management attention and resources to integrating the diverse business practices and operations of Invitrogen and ABI. The integration process may divert the attention of Invitrogen's and ABI's executive officers and management from day-to-day operations and disrupt the business of either or both of the companies and, if implemented ineffectively, preclude realization of the full benefits of the transaction expected by Invitrogen and ABI. Invitrogen has not previously completed a merger or acquisition comparable in size or scope to the transaction. The failure of the combined company to meet the challenges involved in integrating successfully the operations of Invitrogen and ABI or otherwise to realize any of the anticipated benefits of the transaction could cause an interruption of, or a loss of momentum in, the activities of the combined company and could seriously harm its results of operations. In addition, the overall integration of the two companies may result in unanticipated problems, expenses, liabilities, competitive responses, loss of customer relationships, and diversion of management's attention, and may cause the combined company's stock price to decline. The difficulties of combining the operations of the companies include, among others:

maintaining employee morale and retaining key employees;

preserving important strategic and customer relationships;

unanticipated issues in integrating information, communications and other systems;

consolidating corporate and administrative infrastructures and eliminating duplicative operations;

coordinating marketing functions;

unanticipated incompatibility of logistics, marketing and administration methods;

Table of Contents

integrating the business cultures of both companies;

the diversion of management's attention from ongoing business concerns; and

coordinating geographically separate organizations.

In addition, even if the operations of Invitrogen and ABI are integrated successfully, the combined company may not fully realize the expected benefits of the transaction, including the synergies, cost savings, or sales or growth opportunities. These benefits may not be achieved within the anticipated time frame, or at all. Further, because the businesses of Invitrogen and ABI differ, the results of operations of the combined company and the market price of Invitrogen common stock may be affected after the transaction by factors different from those affecting the shares of Invitrogen common stock and Applied Biosystems stock currently, and may suffer as a result of the transaction. As a result, Invitrogen and ABI cannot assure you that the combination of ABI with Invitrogen will result in the realization of the full benefits anticipated from the transaction.

If Invitrogen is unable to finance the merger through existing cash balances and borrowings from the Credit Facilities, the completion of the merger will be jeopardized.

Invitrogen intends to finance the cash portion of the merger consideration primarily with the Credit Facilities, existing cash balances of Invitrogen and ABI and cash flow from operations. Although Invitrogen has entered into a financing commitment letter with Bank of America, BAS, UBS Finance, UBS and MSSF, or the Commitment Parties, the financing commitment letter includes certain customary conditions to funding, including, without limitation, receipt of requisite approvals and satisfaction of the conditions to closing of the merger as set forth in the merger agreement. In the event that these conditions are not satisfied or the funding of the Credit Facilities does not occur for any other reason and Invitrogen is unable to finance the merger, but is still obligated to complete the merger, Invitrogen may have to adopt one or more alternatives, such as selling assets or restructuring debt, which may adversely affect Invitrogen's business, financial condition and results of operations. In addition, it may be difficult for Invitrogen to access existing cash balances at Invitrogen's or ABI's foreign subsidiaries because of regulatory restrictions under foreign law and adverse tax consequences. Financing alternatives may not be available on acceptable terms, in a timely manner or at all. If other financing becomes necessary and Invitrogen is unable to secure such additional financing, the completion of the merger will be jeopardized and Invitrogen could be in breach of the merger agreement.

The issuance of shares of Invitrogen common stock to Applied Biosystems stockholders in the merger will substantially reduce the percentage ownership interests of current Invitrogen stockholders.

If the transaction is completed, Invitrogen and ABI expect that, based on shares of Applied Biosystems stock and ABI's equity-based incentive awards outstanding as of June 11, 2008, and assuming merger consideration of \$38.00 in value for each share of Applied Biosystems stock, Invitrogen will pay between \$3.0 billion and \$3.2 billion in cash and issue approximately 80 million shares of Invitrogen common stock in the merger. Holders of Applied Biosystems stock are expected to own approximately 45% of the shares of Invitrogen common stock outstanding after the merger. Invitrogen stockholders will continue to own their existing shares of Invitrogen common stock, which will not be affected by the merger, other than by the dilution resulting from the issuance of Invitrogen common stock in the merger. The issuance of approximately 80 million shares of Invitrogen common stock to holders of Applied Biosystems stock and holders of ABI's equity-based incentive awards will cause a significant reduction in the relative percentage interests of current Invitrogen stockholders in earnings, voting, liquidation value and book and market value.

Table of Contents

At the Applied Biosystems special meeting of stockholders, holders of Applied Biosystems stock will not know the exact value of Invitrogen common stock that will be issued in the merger. The exchange ratio set forth in the merger agreement is fixed and will not be adjusted in the event of any change in the market price of either Invitrogen common stock or Applied Biosystems stock. However, if the 20-day VWAP of Invitrogen common stock is less than \$46.00 per share, the value of the stock portion of the merger consideration to be received by holders of Applied Biosystems stock in the merger will decrease, and if the 20-day VWAP of Invitrogen common stock is less than \$43.69 per share, there will not be any cash paid in addition to the amount calculated as described below.

The market price of Invitrogen common stock at the time of completion of the merger may vary significantly from the price on the date of the merger agreement, the price at the time that the per share merger consideration was determined or from the price on the dates of the Invitrogen special meeting of stockholders and the Applied Biosystems special meeting of stockholders. On June 10, 2008, the last trading day before the execution date of the merger agreement, Invitrogen common stock closed at \$43.69 per share, as reported on NASDAQ. On June 11, 2008, the last full trading day prior to the public announcement of the proposed merger, Invitrogen common stock closed at \$43.35 per share as reported on NASDAQ. From June 12, 2008, the day of the announcement of the proposed merger through September 5, 2008, the trading price of Invitrogen common stock ranged from a closing high of \$44.35 per share to a closing low of \$36.73 per share.

If the 20-day VWAP of Invitrogen common stock is less than \$46.00 per share, then holders of Applied Biosystems stock who receive all or a portion of their consideration in shares of Invitrogen stock will also receive an additional cash amount of up to \$1.05 per share of Applied Biosystems stock if such holder elects mixed consideration, or up to \$1.91 per share of Applied Biosystems stock if such holder elects stock consolidation. If, however, the 20-day VWAP of Invitrogen common stock is less than \$43.69 per share, there will not be any cash paid in addition to the amount calculated as described above. There will not be any adjustment to the merger consideration if the 20-day VWAP of Invitrogen common stock is greater than \$46.00 per share. Applied Biosystems stockholders who receive only cash consideration will not receive any additional amounts.

Invitrogen and ABI are working to complete the transaction as quickly as possible. However, there is no way to predict how long it will take to satisfy the conditions to closing the merger and to complete the transaction. Because the date when the transaction is completed will be later than the date of the special meetings of stockholders, Invitrogen and Applied Biosystems stockholders may not know the exact value of the Invitrogen common stock that will be issued in the merger at the time they vote on the merger proposals. As a result, if the market price of Invitrogen common stock at the completion of the merger is less than \$43.69, the value of the per share merger consideration received by Applied Biosystems stockholders who receive a portion of the merger consideration in Invitrogen common stock will be lower than \$38.00, the value of the per share merger consideration for stockholders, if any, who receive only cash. In addition, the market price of Invitrogen common stock could fall to a level such that counsel to Invitrogen and ABI would not be able to deliver the tax opinions that are a condition to the closing of the merger because such counsel determine that the merger does not satisfy the continuity of interest requirement for a tax-free reorganization under Section 368(a) of the Internal Revenue Code.

Applied Biosystems stockholders may receive a form or combination of consideration different from what they elect.

While each holder of Applied Biosystems stock may elect to receive all cash, all Invitrogen common stock or a combination of cash and Invitrogen common stock pursuant to the merger, the pools of cash and Invitrogen common stock available for all Applied Biosystems stockholders will be fixed (except to the extent additional cash is payable if the 20-day VWAP of Invitrogen common is less than \$46.00 per share). Accordingly, depending on the elections made by other Applied Biosystems stockholders, if a holder of Applied Biosystems stock elects to receive all cash pursuant to the merger, such holder may receive a portion of the consideration in Invitrogen common stock and if a holder of Applied Biosystems stock elects to receive all Invitrogen common stock pursuant to the merger, such holder may receive a portion of the consideration in cash. If a holder of

Table of Contents

Applied Biosystems stock does not submit a properly completed and signed election form to the exchange agent by the election deadline, then such stockholder will have no control over the type of merger consideration such stockholder may receive, and, consequently, will receive mixed consideration consisting of both Invitrogen common stock and cash.

If you deliver shares of Applied Biosystems stock to make an election, you will not be able to sell those shares unless you revoke your election prior to the election deadline.

If you are a holder of Applied Biosystems stock and want to make an election, you must deliver to the exchange agent by the election deadline a properly completed and signed election form along with stock certificates (or a properly completed notice of guaranteed delivery) or, in the case of book-entry shares, any additional documents specified in the procedures set forth in the election form. You will not be able to sell any shares of Applied Biosystems stock that you have delivered unless you revoke your election before the deadline by providing written notice to the exchange agent. If you do not revoke your election, you will not be able to liquidate your investment in Applied Biosystems stock for any reason until you receive cash or Invitrogen common stock pursuant to the merger. In the time between delivery of your shares and the closing of the merger, the market price of Applied Biosystems stock or Invitrogen common stock may change, and you might otherwise want to sell your shares of Applied Biosystems stock to gain access to cash, make other investments, or reduce the potential for a decrease in the value of your investment.

The date on which Applied Biosystems stockholders will receive the merger consideration is uncertain.

The date on which Applied Biosystems stockholders will receive the merger consideration depends on the satisfaction of the closing conditions set forth in the merger agreement, or the waiver of those conditions by the parties thereto. While Invitrogen and ABI expect to complete the merger in the fall of 2008, the completion date of the merger might be later than expected because of unforeseen events including the timing of or delay in receiving certain required approvals.

Some of the conditions to the merger may be waived by Invitrogen or ABI without resoliciting stockholder approval of the merger agreement.

Some of the conditions set forth in the merger agreement may be waived by Invitrogen or ABI, subject to the agreement of the other party in specific cases. See The Merger Agreement Conditions to Completion of the Merger. If any conditions are waived, Invitrogen and ABI will evaluate whether amendment of this joint proxy statement/prospectus and resolicitation of proxies is warranted. In the event that the board of directors of Invitrogen or ABI determines that resolicitation of stockholders is not warranted, the applicable company will have the discretion to complete the transaction without seeking further stockholder approval.

Provisions of the merger agreement may deter alternative business combinations.

Restrictions in the merger agreement on solicitation generally prohibit Invitrogen and ABI from soliciting any acquisition proposal or offer for a merger or business combination with any other party, including a proposal that might be advantageous to the stockholders of Invitrogen or ABI when compared to the terms and conditions of the merger described in this joint proxy statement/prospectus. In addition, if the merger agreement is terminated, under certain specified circumstances, Invitrogen or ABI could be required to pay the other a termination fee of \$150 million. These provisions may deter third parties from proposing or pursuing alternative business combinations that might result in greater value to holders of Invitrogen common stock or holders of Applied Biosystems stock than the transaction.

Table of Contents

Provisions of the merger agreement for the payment of a termination fee could negatively affect the stock prices of Invitrogen common stock and Applied Biosystems stock if the merger agreement is terminated in certain circumstances.

In the event the merger is terminated by Invitrogen or ABI in circumstances that obligate either party to pay the termination fee to the other party, including if either party terminates the merger agreement because the other party's board of directors withdraws its support of the merger, the trading price of Invitrogen's common stock and/or Applied Biosystems' stock may decline.

Directors and executive officers of ABI have interests in the transaction that may be different from, or in addition to, the interests of Applied Biosystems stockholders.

In considering the recommendation of ABI's board of directors, Applied Biosystems stockholders should be aware that ABI's directors and executive officers have interests in the merger and have arrangements that are different from, or in addition to, those of Applied Biosystems stockholders generally. These interests and arrangements may create potential conflicts of interest.

These interests and arrangements include:

change-in-control severance agreements with ABI's current executive officers that provide for, among other things, severance benefits in the event of certain qualifying terminations of employment in connection with or following the merger;

vesting of all unvested equity awards, including those held by ABI's directors and executive officers;

vesting and conversion into Applied Biosystems stock of all unvested restricted stock units;

accelerated payment of awards under ABI's Performance Unit Bonus Plan;

continued service on Invitrogen's board of directors by three of ABI's directors and the appointment of Mark. P. Stevenson as President and Chief Operating Officer of Invitrogen; and

continued indemnification and insurance coverage as required under the merger agreement.

As a result of these interests, directors and officers of ABI could be more likely to vote, and, in the case of directors, recommend to stockholders that they vote, to adopt the merger agreement and approve the merger than if they did not hold these interests and may have reasons for doing so that are not the same as the interests of other Applied Biosystems stockholders. For a full description of the interests of directors and executive officers of ABI in the merger, see *The Merger Interests of ABI's Directors and Executive Officers in the Merger*.

The merger is subject to waiting periods and the receipt of consents and approvals from, or challenge by, various governmental entities that may impose conditions on, jeopardize or delay consummation of, or reduce the anticipated benefits of, the merger.

Completion of the merger is conditioned upon the receipt of any material governmental consents and approvals, including (1) the review of transactions related to the merger by the DOJ and the FTC, and the expiration or termination of the applicable statutory waiting period, and any extension thereof, under the HSR Act, which expired at 11:59 p.m. on July 28, 2008, and (2) the expiration or termination of the applicable waiting period under the ECMR, as well as the approval of competition regulatory authorities in several other countries.

At any time before or after the effective time of the merger, the DOJ, the FTC or others (including states and private parties) could take action under the applicable antitrust laws, including seeking to prevent the merger, to rescind the merger or to conditionally approve the merger upon the divestiture of assets. There can be no assurance that a challenge to the merger on antitrust grounds will not be made or, if a challenge is made, that it would not be successful.

Table of Contents

These consents and approvals may impose conditions on, or require divestitures relating to, the divisions, operations or assets of Invitrogen or ABI that could have an adverse effect on Invitrogen, ABI or the combined company. These conditions or divestitures may jeopardize or delay completion of the merger or may reduce the anticipated benefits of the merger. Further, no assurance can be given that the required consents and approvals will be obtained or that the required conditions to closing will be satisfied. In addition, if all required consents and approvals are obtained and the conditions are satisfied, no assurance can be given as to the terms, conditions and timing of the approvals or that they will satisfy the terms of the merger agreement.

Whether or not the merger is consummated, the announcement and pendency of the merger could cause disruptions in the businesses of Invitrogen and ABI, which could have an adverse effect on their businesses and financial results.

Whether or not the merger is consummated, the announcement and pendency of the merger could cause disruptions in or otherwise negatively affect the businesses of Invitrogen and ABI. Among other things:

the business combination of Invitrogen and ABI may disrupt the respective companies' business relationships with current customers, who may delay or defer decisions about current and future agreements with Invitrogen and ABI because of the pending merger;

current and prospective employees of Invitrogen and ABI may experience uncertainty about their future roles with the combined company, which might adversely affect Invitrogen's and ABI's ability to retain key managers and other employees; and

the attention of management of each of Invitrogen and ABI may be directed from business operations toward the consummation of the merger.

These disruptions could be exacerbated by a delay in the consummation of the merger or termination of the merger agreement and could have an adverse effect on the respective businesses and financial results of Invitrogen and ABI if the merger is not consummated or of the combined company if the merger is consummated.

If the merger is not consummated, Invitrogen and ABI will have incurred substantial costs that may adversely affect Invitrogen's and ABI's financial results and operations and the market price of Invitrogen common stock and Applied Biosystems stock.

Invitrogen and ABI have incurred and will continue to incur substantial costs in connection with the proposed merger. These costs are primarily associated with the fees of their respective financial advisors, accountants and attorneys. In addition, Invitrogen and ABI have each diverted significant management resources in an effort to consummate the merger and are each subject to restrictions contained in the merger agreement on the conduct of their businesses. If the merger is not consummated, Invitrogen and ABI will have incurred significant costs, including the diversion of management resources, from which they will have received little or no benefit. Also, if the merger is not consummated under certain circumstances specified in the merger agreement, Invitrogen or ABI may be required to pay the other party a termination fee of \$150 million.

In addition, if the merger is not consummated, Invitrogen and ABI may experience negative reactions from the financial markets and Invitrogen's and ABI's collaborative partners, customers and employees. Each of these factors may adversely affect the trading price of Invitrogen's common stock and Applied Biosystems stock and/or Invitrogen's and ABI's financial results and operations.

Table of Contents

Risks Related to the Combined Company

The combined company will have more indebtedness after the merger, which could adversely affect its cash flows and business.

In order to complete the merger, Invitrogen has obtained a commitment for funding in an aggregate amount of \$2.65 billion, consisting of a revolving credit facility of \$250 million and term facilities aggregating \$2.4 billion. Borrowings made from the Credit Facilities will be used, in part, to fund the cash portion of the consideration paid to holders of Applied Biosystems stock. Invitrogen's debt outstanding as of June 30, 2008 was approximately \$1.15 billion, but immediately after the merger, the combined company's debt is anticipated to be approximately \$3.6 billion. As of June 30, 2008, Invitrogen's debt service obligations, comprised of interest (excluding capital leases and equipment notes), during the next twelve months, in the absence of the merger, are projected to be approximately \$25.1 million. On a pro forma basis and based on assumed interest rates, leverage ratios and credit ratings, after incurring the debt financing to effect the merger, Invitrogen's debt service obligations, comprised of principal and interest (excluding capital leases and equipment notes), during the twelve months following the merger are projected to be approximately \$254.0 million. If Invitrogen's leverage ratio is higher or interest rates are higher, Invitrogen's interest expense, unused revolving line of credit fees and up-front fees may be greater. Based on anticipated indebtedness of approximately \$2.4 billion under the Credit Facilities throughout the twelve months ended June 30, 2009, if market rates of interest were to average 1% higher or lower during that same twelve-month period, Invitrogen's net-of-tax interest expense would increase or decrease by approximately \$14.5 million. As a result of this increase in debt, demands on Invitrogen's cash resources will increase after the completion of the merger. The increased levels of debt could, among other things:

require the combined company to dedicate a substantial portion of its cash flow from operations to the servicing and repayment of its debt, thereby reducing funds available for working capital, capital expenditures, dividends, acquisitions and other purposes;

increase the combined company's vulnerability to, and limit flexibility in planning for, adverse economic and industry conditions;

adversely affect the combined company's credit rating, with the result that the cost of servicing the combined company's indebtedness might increase;

limit the combined company's ability to obtain additional financing to fund future working capital, capital expenditures, additional acquisitions and other general corporate requirements;

create competitive disadvantages compared to other companies with less indebtedness;

adversely affect the combined company's stock price;

limit the combined company's ability to apply proceeds from an offering, debt incurrence or asset sale to purposes other than the servicing and repayment of debt; and

limit the combined company's ability to pay dividends and repurchase stock.

The Credit Facilities will contain restrictions that limit the combined company's flexibility in operating its business.

The Credit Facilities will contain various covenants that will limit the combined company's ability to engage in specified types of transactions. These covenants will limit the combined company's and its subsidiaries' ability to, among other things:

Edgar Filing: INVITROGEN CORP - Form S-4/A

incur additional indebtedness (including guarantees or other contingent obligations);

pay dividends on, repurchase or make distributions in respect of the combined company's common stock or make other restricted payments;

make certain investments (including loans and advances);

Table of Contents

sell or transfer assets;

create liens;

consolidate, merge, sell or otherwise dispose of all or substantially all of its assets; and

enter into certain transactions with its affiliates.

In addition, under the Credit Facilities, the combined company will be required to satisfy and maintain specified financial ratios and other financial condition tests. The combined company's ability to meet those financial ratios and tests can be affected by events beyond the combined company's control, and Invitrogen and ABI cannot assure you that the combined company will meet those ratios and tests. A breach of any of these covenants could result in a default under the Credit Facilities. Upon the occurrence of an event of default under the Credit Facilities, the combined company's lenders could elect to declare all amounts outstanding under the Credit Facilities to be immediately due and payable and terminate all commitments to extend further credit. If the combined company were unable to repay those amounts, the lenders under the Credit Facilities could proceed against the collateral granted to them to secure such indebtedness. The combined company will pledge substantially all of its assets as collateral under the Credit Facilities.

ABI may be subject to tax as a result of the Celera separation and the merger, and Applied Biosystems stockholders may be subject to tax as a result of the merger.

The merger agreement provides that ABI will be merged with and into Atom Acquisition, with Atom Acquisition continuing as the surviving company. Although the parties intend the merger to constitute a tax-free reorganization, neither ABI nor Invitrogen has sought or obtained a ruling from the Internal Revenue Service. There is, therefore, a risk that all the gain or loss realized by ABI and Applied Biosystems stockholder as a result of the merger may be subject to tax. See Material U.S. Federal Income Tax Consequences of the Merger.

The Celera separation is subject to tax risks, including restrictions on ABI's future actions in order to maintain the tax-free status of the Celera separation. Further, there is a risk that on account of the merger or otherwise, the Celera separation from ABI on July 1, 2008 may be determined to be a taxable transaction to ABI. Included in the June 30, 2008 pro forma balance sheet is a \$50 million tax reserve for the potential tax due as a result of the Celera separation. This reserve is an estimate of the potential tax exposure as required by FIN 48.

If the combined company is unable to manage its growth, its business and financial results could suffer.

The combined company's future financial results will depend in part on its ability to manage profitably its core businesses, including any growth that the combined company may be able to achieve. Over the past several years, each of Invitrogen and ABI has engaged in the identification of, and competition for, growth and expansion opportunities. In order to achieve those initiatives, the combined company will need to maintain existing customers and attract new customers, recruit, train, retain and effectively manage employees, as well as expand operations, customer support and financial control systems. If the combined company is unable to manage its businesses effectively and profit from any growth that the combined company may be able to achieve, its business and financial results could suffer.

The pro forma financial statements are presented for illustrative purposes only and may not be an indication of the combined company's financial condition or results of operations following the transaction.

The pro forma financial statements contained in this joint proxy statement/prospectus are presented for illustrative purposes only and may not be an indication of the combined company's financial condition or results of operations following the merger for several reasons. The pro forma financial statements have been derived from the historical financial statements of Invitrogen and ABI and adjustments and assumptions have been made regarding the combined company after giving effect to the transaction. The information upon which these adjustments and assumptions have been made is preliminary, and these kinds of adjustments and assumptions are difficult to make with accuracy. Moreover, the pro forma financial statements do not reflect all costs that are expected to be incurred by the combined company in connection with the transaction. For example, the impact of

Table of Contents

any incremental costs incurred in integrating the two companies is not reflected in the pro forma financial statements. As a result, the actual financial condition and results of operations of the combined company following the merger may not be consistent with, or evident from, these pro forma financial statements.

The assumptions used in preparing the pro forma financial information may not prove to be accurate, and other factors may affect the combined company's financial condition or results of operations following the transaction.

Any decline or potential decline in the combined company's financial condition or results of operations may cause significant variations in the stock price of the combined company. See Unaudited Pro Forma Condensed Combined Financial Statements.

To be successful, the combined company must retain and motivate key employees, and failure to do so could seriously harm the combined company.

To be successful, the combined company must retain and motivate executives and other key employees. The combined company's ability to retain qualified senior management and business development and technical staff will be particularly important to its future success. Employees of Invitrogen and ABI may experience uncertainty about their future roles with the combined company until strategies for the combined company are announced or executed. These circumstances may adversely affect the combined company's ability to retain key personnel. The combined company also must continue to motivate employees and keep them focused on the strategies and goals of the combined company, which effort may be adversely affected as a result of any uncertainty or difficulty that may arise during the process of integrating Invitrogen and ABI. If the combined company is unable to retain executives and other key employees, the roles and responsibilities of such executive officers and employees will need to be filled either by existing or new officers and employees, which may require the combined company to devote time and resources to identifying, hiring and integrating replacements for the departed executives that could otherwise be used to integrate the businesses of Invitrogen and ABI or to pursue business opportunities.

The merger will result in substantial goodwill for the combined company. If the combined company's goodwill or intangible assets become impaired, then the profits of the combined company may be significantly reduced or eliminated.

Because Invitrogen has grown through acquisitions, goodwill and other intangible assets represent a substantial portion of its assets. Invitrogen's goodwill and net purchased intangible assets were approximately \$1.87 billion as of June 30, 2008 and the amount of the combined company's goodwill and other net purchased intangible assets are expected to increase substantially as a result of the merger. On a pro forma basis, after giving effect to the merger and related events and applying the assumptions set forth in the unaudited pro forma condensed combined financial statements, the combined company's pro forma goodwill as of June 30, 2008 is estimated to be approximately \$5.5 billion, and the combined company's pro forma net purchased intangible assets, which will be amortized over a period ranging from approximately four months to fifteen years, is estimated to be approximately \$2.8 billion. If any of the combined company's goodwill or intangible assets were to become impaired, the combined company would be required to write off the impaired amount, which may significantly reduce or eliminate its profits.

A portion of ABI's business is conducted through partnerships and joint ventures with third parties. In certain cases, if these third parties do not provide their consent, the merger may result in termination of, or the right of the joint venture partner to terminate, the applicable partnership or joint venture which could adversely impact the business of the combined company.

ABI conducts a portion of its business through partnerships and joint ventures with third parties, including a joint venture with MDS Inc. of Canada called Applied Biosystems/MDS Analytical Technologies Instruments. These relationships are governed by partnership and joint venture agreements that define the rights and

Table of Contents

responsibilities of each party. Under these agreements, the merger may be deemed to constitute a change of control of ABI which may result in termination of, or the right of the joint venture partner to terminate, the applicable partnership or joint venture. The termination of such partnerships or joint ventures could adversely impact our business and operation. ABI's joint venture with MDS has a term that will expire on October 31, 2011. However, the joint venture agreement includes provisions for termination at the election of a partner if there are material breaches of the agreement, there is a disagreement over a fundamental issue requiring consent of both partners, or a partner becomes subject to the control of another entity through acquisition or merger (including possibly the merger with Invitrogen). Accordingly, as a result of the merger, MDS could assert that it has the right to, and may seek to, terminate the joint venture with ABI prior to the expiration of its term. Termination in certain events, such as for a material breach, may also allow a partner to pursue other remedies. Notwithstanding the expiration of the term or any such early termination, the joint venture agreement provides that the affairs of the joint venture will continue with respect to all products developed prior to the expiration or termination, or for any products under development whose development can be completed within one year following expiration or termination. Accordingly, following a termination of the MDS joint venture, such products should continue to be manufactured and sold (and the profits and losses divided equally between the partners) for the life of the products and the related agreements governing the manufacturing, purchase and distribution of those products should continue in full force and effect. Nonetheless, an early termination of the MDS joint venture agreement could adversely affect our working relationship with MDS and adversely impact the business of the combined company.

The combined company could be fined or lose the right to conduct some of its businesses if it fails to comply with applicable laws and regulations, which may change at any time.

A variety of federal, state, local and foreign laws and regulations apply to the business of the combined company. Failure to comply with applicable requirements may lead to civil penalties or require the combined company to assume indemnification obligations or breach contractual provisions. Invitrogen and ABI cannot guarantee that existing or future laws or regulations, including state and local tax laws, will not adversely affect the business of the combined company.

Table of Contents

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

Statements contained in this joint proxy statement/prospectus that are not historical facts may constitute forward-looking statements, including statements relating to timing of and satisfaction of conditions to the merger, whether any of the anticipated benefits of the merger will be realized, future revenues, future net income, future cash flows, financial forecasts, future competitive positioning and business synergies, future acquisition cost savings, future expectations that the merger will be accretive to GAAP and cash earnings per share, future market demand, future benefits to stockholders, future debt payments and future economic and industry conditions. Words such as expect, estimate, project, budget, forecast, anticipate, intend, plan, may, will, could, should, believe, predict, potential, continue and similar expressions are used to identify forward-looking statements. Invitrogen and ABI believe that their expectations are reasonable and are based on reasonable assumptions. However, such forward-looking statements by their nature involve risks and uncertainties that could cause actual results to differ materially from the results predicted or implied by the forward-looking statement. Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements include those set forth in Invitrogen's and ABI's filings with the SEC. The potential risks and uncertainties include, but are not limited to:

potential difficulties that may be encountered in integrating the merged businesses;

potential uncertainties regarding market acceptance of the combined company;

uncertainties as to the timing of the merger;

uncertainties regarding approval of the transaction by the stockholders of the companies and the satisfaction of other closing conditions to the transaction;

Invitrogen's and ABI's ability to protect their respective intellectual property rights;

competitive responses to the merger;

an economic downturn;

risks that revenues following the merger may be lower than expected;

Invitrogen's and ABI's ability to make accurate estimates and control costs;

Invitrogen's and ABI's and their respective partners' ability to bid on, win, perform and renew contracts and projects;

the need to develop new products and adapt to significant technological change;

exposure to environmental liabilities and litigation;

liabilities for pending and future litigation;

the impact of changes in laws and regulations;

industry competition;

Invitrogen's ability to obtain the financing required to complete the merger, and the terms of such financing;

Invitrogen's and ABI's ability to attract and retain key employees;

employee, agent or partner misconduct;

risks associated with changes in equity-based compensation requirements;

Invitrogen's and ABI's leveraged position and ability to service debt;

risks associated with international operations;

third-party software risks;

Table of Contents

terrorist and natural disaster risks; and

anti-takeover risks and other factors.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this joint proxy statement/prospectus or, in the case of documents incorporated by reference, as of the date of those documents. Invitrogen and ABI disclaim any intent or obligation to update any forward-looking statements contained herein.

Table of Contents

INFORMATION ABOUT INVITROGEN

Invitrogen is a leading developer, manufacturer and marketer of research tools in reagent, kit and high-throughput applications forms to customers engaged in life sciences research, drug discovery, diagnostics and the commercial manufacture of biological products. Additionally, Invitrogen is a leading supplier of sera, cell and tissue culture media and reagents used in life sciences research, as well as in processes to grow cells in the laboratory and produce pharmaceuticals and other highly valued proteins.

Invitrogen's research tools and reagents simplify and improve gene cloning, gene expression and gene analysis techniques. These techniques are used to study how a gene or cell is regulated by its genetic mechanisms, known as functional genomics, and to search for drugs that can treat diseases. In addition, Invitrogen has a portfolio of products for proteomics applications, providing tools to help researchers understand the function of proteins, their roles in biological pathways, and importance in diseases such as cancer. Invitrogen's leading products include gel-based separations technologies, antibodies, and transfection agents. Invitrogen's goal is to provide tools, which allow researchers to perform this complex biological research more accurately, efficiently and with greater reproducibility compared to conventional research methods. Invitrogen's scientific know-how is making biodiscovery research techniques more effective and efficient to pharmaceutical, biotechnology, agricultural, government and academic researchers with backgrounds in a wide range of scientific disciplines.

Invitrogen offers many different products and services, and is continually developing and/or acquiring others. Some of its specific product categories include the following:

High-throughput gene cloning and expression technology, which allows customers to clone and expression-test genes on an industrial scale;

Pre-cast electrophoresis products, which improve the speed, reliability and convenience of separating nucleic acids and proteins;

Antibodies, which allow researchers to capture and label proteins, visualize their location through use of Molecular Probes dyes and discern their role in disease;

Magnetic beads, which are used in a variety of settings, such as attachment of molecular labels, nucleic acid purification, and organ and bone marrow tissue type testing;

Molecular Probes fluorescence-based technologies, which facilitate the labeling of molecules for biological research and drug discovery;

Transfection reagents, which are widely used to transfer genetic elements into living cells enabling the study of protein function and gene regulation; and

Media and serum, which allow researchers to grow cells for research and industrial scale customers to develop and grow biological large molecule products.

Table of Contents

INFORMATION ABOUT ABI

Applied Biosystems Inc. (formerly known as Applied Biosystems Corporation), or ABI, is a global leader in the development and marketing of instrument-based systems, consumables, software, and services for academic research, the life science industry and commercial markets. Driven by its employees' belief in the power of science to improve the human condition, ABI commercializes innovative technology solutions for DNA, RNA, protein and small molecule analysis. Customers across the disciplines of academic and clinical research, pharmaceutical research and manufacturing, forensic DNA analysis, and agricultural biotechnology use ABI's tools and services to accelerate scientific discovery, improve processes related to drug discovery and development, detect potentially pathogenic microorganisms, and identify individuals based on DNA sources.

ABI's products and services are designed to address the demand for increased automation and efficiency in pharmaceutical and biotechnology laboratories by combining the detection capabilities of analytical instruments with advances in automation and laboratory work-flow design. The markets for ABI's products and services span the spectrum of the life sciences industry and research community, including: basic human disease research and genetic analysis performed by universities, government agencies, and other non-profit organizations; pharmaceutical drug discovery, development, and manufacturing; and agriculture research. ABI has a comprehensive service and field applications support team for a global installed base of high-performance genetic and protein analysis solutions.

Table of Contents**SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT****Invitrogen**

The following table sets forth information as of September 5, 2008, regarding the beneficial ownership of Invitrogen's common stock by (1) each person known by us to own beneficially more than five percent of Invitrogen outstanding common stock; (2) each director, Invitrogen's chief executive officer and chief financial officer, and Invitrogen's three most highly compensated executive officers other than the chief executive officer and chief financial officer, as identified in Invitrogen's most recent proxy statement on Schedule 14A, with such officers being referred to as named executive officers and (3) all directors and executive officers as a group. Except as otherwise specified, the named beneficial owner has sole voting and investment power over the shares listed. Except as otherwise indicated, the address for each beneficial owner is c/o Invitrogen Corporation, 5791 Van Allen Way, Carlsbad, California 92008. The percentages below are based on 92,117,285 shares of Invitrogen common stock outstanding as of September 5, 2008.

Stock Ownership Table

| Name and Address of Beneficial Owner | Amount and Nature of Beneficial Ownership of Common Stock⁽¹⁾ | Percentage of Common Stock |
|---|--|-----------------------------------|
| Gregory T. Lucier ⁽²⁾ | 1,000,298 | 1.1% |
| Nicolas M. Barthelemy ⁽³⁾ | 71,374 | * |
| Claude D. Benchimol, Ph.D. ⁽⁴⁾ | 143,016 | * |
| David F. Hoffmeister ⁽⁵⁾ | 463,068 | * |
| Peter M. Leddy, Ph.D. ⁽⁶⁾ | 181,369 | * |
| Donald W. Grimm ⁽⁷⁾ | 97,228 | * |
| Raymond V. Dittamore ⁽⁸⁾ | 122,440 | * |
| Balakrishnan S. Iyer ⁽⁹⁾ | 81,228 | * |
| Bradley G. Lorimier ⁽¹⁰⁾ | 145,428 | * |
| Ronald A. Matricaria ⁽¹¹⁾ | 77,228 | * |
| Per A. Peterson, Ph.D. ⁽¹²⁾ | 7,420 | * |
| W. Ann Reynolds, Ph.D. ⁽¹³⁾ | 45,914 | * |
| David C. U Prichard, Ph.D. ⁽⁴⁾ | 57,028 | * |
| All Directors and Executive Officers as group | 2,493,039 | 2.6% |

* Less than 1%

- (1) Beneficial ownership is determined in accordance with the rules of the SEC, based on factors including voting and investment power with respect to shares. Percentage of beneficial ownership is based on the number of shares of Invitrogen common stock outstanding as of September 5, 2008. Shares of Invitrogen common stock issuable upon conversion of convertible notes, or the exercise of options or warrants currently exercisable, or exercisable within 60 days after September 5, 2008, are deemed outstanding for the purpose of computing the percentage ownership of the person holding such options or warrants, but are not deemed outstanding for computing the percentage ownership of any other persons.
- (2) Consists of 124,196 shares owned directly by Mr. Lucier, and 876,102 shares Mr. Lucier may acquire upon the exercise of stock options.
- (3) Consists of 34,374 shares owned directly by Mr. Barthelemy, and 37,000 shares Mr. Barthelemy may acquire upon the exercise of stock options.
- (4) Consists of 21,266 shares owned directly by Dr. Benchimol, and 121,750 shares Dr. Benchimol may acquire upon the exercise of stock options.
- (5) Consists of 9,566 shares owned directly by Mr. Hoffmeister, and 453,502 shares Mr. Hoffmeister may acquire upon the exercise of stock options.
- (6) Consists of 25,869 shares owned directly by Dr. Leddy, and 155,500 shares Dr. Leddy may acquire upon the exercise of stock options.

Table of Contents

- (7) Consists of 8,000 shares owed by Donald and Kathryn A. Grimm, Trustees, the Grimm Family Trust dated January 31, 1986, 9,228 shares of restricted stock, and 80,000 shares Mr. Grimm may acquire upon the exercise of stock options.
- (8) Consists of 4,000 shares owned directly by a family trust in which Mr. Dittamore has a beneficial interest, 9,228 shares of restricted stock, 1,212 shares owned as Deferred Stock Units, and 108,000 shares that Mr. Dittamore may acquire upon the exercise of stock options.
- (9) Consists of 4,000 shares owned directly by Mr. Iyer, 9,228 shares of restricted stock, and 68,000 shares that Mr. Iyer may acquire upon the exercise of stock options.
- (10) Consists of 8,200 shares owned directly by Mr. Lorimier, 9,228 shares of restricted stock, and 128,000 shares Mr. Lorimier may acquire upon the exercise of stock options.
- (11) Consists of 20,000 shares owned directly by Mr. Matricaria, 9,228 shares of restricted stock, and 48,000 shares that Mr. Matricaria may acquire upon the exercise of stock options.
- (12) Consists of 5,502 shares of restricted stock, and 1,918 shares that Dr. Peterson may acquire upon the exercise of stock options.
- (13) Consists of 5,616 shares owned directly by Dr. Reynolds, 9,612 shares of restricted stock, and 30,686 shares that Dr. Reynolds may acquire upon the exercise of stock options.
- (14) Consists of 7,000 shares owned directly by Dr. U Prichard, 9,228 shares of restricted stock, and 40,800 shares that Dr. U Prichard may acquire upon the exercise of stock options.

Table of Contents**ABI**

The following table sets forth information as of September 4, 2008, regarding the beneficial ownership of Applied Biosystems stock by (1) each person known by ABI to own beneficially more than five percent of the outstanding shares of Applied Biosystems stock; (2) each director and ABI's chief executive officer and chief financial officer, and ABI's three most highly compensated executive officers other than the chief executive officer and chief financial officer, as identified in ABI's most recent proxy statement on Schedule 14A, with such officers being referred to as "named executive officers" and (3) all directors and executive officers as a group. Except as otherwise specified, the beneficial owner has sole voting and investment power over the shares listed. Except as otherwise indicated, the address for each beneficial owner is c/o Applied Biosystems Inc., 301 Merritt 7, Norwalk, Connecticut 06851. The percentages below are based on 169,529,484 shares of Applied Biosystems stock outstanding as of September 4, 2008.

| Name and Address of Beneficial Owner | Amount and Nature of Beneficial Ownership of Common Stock | Percentage of Common Stock |
|--|---|-------------------------------|
| Primecap Management Co. ⁽¹⁾ | 20,370,638 | 12.0% |
| Vanguard Chester Funds ⁽²⁾ | 8,799,800 | 5.2% |
| State Street Bank & Trust Company ⁽³⁾ | 8,590,589 | 5.1% |
| George F. Adam Jr. ⁽⁴⁾ | 3,484 | * |
| Robert H. Hayes ⁽⁴⁾ | 98,999 | * |
| Arnold J. Levine | 65,400 | * |
| William H. Longfield | 33,200 | * |
| Elaine R. Mardis | 2,465 | * |
| Theodore E. Martin | 64,200 | * |
| Carolyn W. Slayman | 72,195 | * |
| James R. Tobin | 64,200 | * |
| Tony L. White ⁽⁵⁾⁽⁶⁾ | 3,148,525 | 1.9% |
| Dennis L. Winger ⁽⁷⁾ | 978,483 | * |
| William B. Sawch | 1,064,216 | * |
| Barbara J. Kerr | 434,403 | * |
| Kathy Ordoñez | 357,400 | * |
| All Directors and Executive Officers as a Group | 6,597,513 | 3.8% |

* Less than 1%.

- (1) Based on an amendment to Schedule 13G filed with the SEC on February 14, 2008, Primecap Management Company had sole voting power with respect to 3,626,088 shares and sole dispositive power with respect to 20,370,638 shares as of December 31, 2007. The business address of Primecap Management Company is 225 South Lake Ave., #400, Pasadena, California 91101.
- (2) Based on a Schedule 13G filed with the SEC on February 14, 2008, Vanguard Chester Funds Vanguard Primecap Fund had sole voting power with respect to 8,799,800 shares as of December 31, 2007. The business address of Vanguard Chester Funds is 100 Vanguard Blvd., Malvern, Pennsylvania 19355.
- (3) Based on a Schedule 13G filed with the SEC on May 5, 2008, State Street Bank & Trust Company, acting in various fiduciary capacities, had sole voting power and shared dispositive power with respect to 8,590,589 shares as of March 31, 2008. The business address of State Street Bank & Trust Company is State Street Financial Center, One Lincoln Street, Boston, Massachusetts 02111.
- (4) Includes 2,6000 shares of restricted stock. Prior to vesting, recipient has the right to vote but may not sell or otherwise dispose of shares.
- (5) Excludes: (a) 75,000 shares of Applied Biosystems stock held by the Elizabeth Ann White Business Interests, LLLLP, a family limited partnership of which Mr. White's adult daughter is the sole general partner and Mr. White's wife and a greater retained annuity trust established by Mr. White are currently the sole limited partners; (b) 29,700 shares of Applied Biosystems stock held by the Tony Lee White 2006 Two Year Grantor Annuity Trust, of which Mr. White's wife is the sole trustee; and (c) 161,760 shares of Applied Biosystems stock held by the Tony Lee White 2007 Grantor Retained Annuity Trust, of which Mr. White's wife is the sole trustee.
- (6) Includes 67,410 shares of restricted stock. Prior to vesting, recipient has the right to vote but may not sell or otherwise dispose of shares.
- (7) Includes 11,235 shares of restricted stock. Prior to vesting, recipient has the right to vote but may not sell or otherwise dispose of shares.

Table of Contents

THE MERGER

General Description of the Merger

Prior to entering into the merger agreement with ABI, Invitrogen formed Atom Acquisition, a Delaware limited liability company and direct wholly-owned subsidiary of Invitrogen. Pursuant to the merger agreement, ABI will be merged with and into Atom Acquisition, and Atom Acquisition will be the surviving company and Invitrogen's direct wholly owned subsidiary.

At the effective time of the merger, or the effective time, each issued and outstanding share of Applied Biosystems stock, par value \$0.01 per share, automatically will be converted into the right to receive \$17.10 in cash and 0.4543 of a share of Invitrogen's common stock, par value \$0.01 per share. Applied Biosystems stockholders may, however, elect to receive for each share of Applied Biosystems stock consideration consisting of either all cash at \$38.00 per share or only shares of Invitrogen common stock at an exchange ratio of 0.8261 per share, in each case, subject to proration if either the cash consideration or stock consideration election is oversubscribed. If the 20-day VWAP of Invitrogen common stock is less than \$46.00 per share, then the holder of Applied Biosystems stock who receives all or a portion of such holder's consideration in shares of Invitrogen stock will also receive the additional cash amount of up to \$1.05 if you elect mixed consideration, or up to \$1.91 per share if you elect stock consideration. If, however, the 20-day VWAP of Invitrogen common stock is less than \$43.69 per share, there will be no further cash adjustment to the stock election or mixed election consideration, and therefore stockholders electing to receive cash consideration may receive consideration with a higher value at the effective time of the merger, although these holders will not participate in any future appreciation of the combined company. In addition,

all options to purchase Applied Biosystems stock will vest and become fully exercisable and be converted into options to purchase shares of Invitrogen common stock;

restricted shares of Applied Biosystems stock will become fully vested and treated as shares electing to receive mixed consideration, each referred to herein as mixed consideration electing shares;

restricted stock units of ABI will become fully vested, settled in shares of Applied Biosystems stock and treated as mixed consideration electing shares; and

each outstanding right to receive shares of Applied Biosystems stock that is held by a director who will not become a director of Invitrogen will be settled in Applied Biosystems stock and treated as though the holder made an election to receive stock consideration.

Upon completion of the transaction, Invitrogen will change its name to Applied Biosystems Inc. (or another name mutually acceptable to ABI and Invitrogen to be selected prior to the merger) and will expand its board of directors from nine to twelve members and appoint three of ABI's current directors to Invitrogen's board of directors.

The merger is expected to qualify as a tax-free reorganization under Section 368(a) of the Internal Revenue Code. Accordingly, the merger is expected to be tax-free to Invitrogen stockholders, and to Applied Biosystems stockholders to the extent that they receive Invitrogen common stock pursuant to the merger.

Background of the Merger

As part of their ongoing management of the business and affairs of their respective companies, the board of directors of ABI, which we refer to as the ABI Board, and the board of directors of Invitrogen, which we refer to as the Invitrogen Board, periodically evaluate available strategic alternatives and consider ways to enhance their respective company's performance and prospects in light of current business and economic conditions. For each company, these reviews have included consideration of potential strategic transactions with other companies in the life sciences industry and the potential benefits and risks of such transactions. In particular, ABI and Invitrogen each considered the potential benefits of a combination of the two companies and, on several

Table of Contents

occasions during the past three years, ABI and Invitrogen engaged in exploratory discussions regarding a potential strategic business combination. These discussions, however, remained exploratory and did not result in any negotiations, agreement, arrangement, or understanding between the parties with respect to a business combination.

The ABI Board also from time to time considered alternatives to ABI's tracking stock structure. Since 1999, ABI had two classes of common stock: the Applera Corporation Applied Biosystems Group common stock and the Applera Corporation Celera Group common stock, which were intended to track the relative performance of ABI's two business groups. On August 8, 2007, ABI announced that the ABI Board had retained Morgan Stanley to assist ABI in exploring alternatives to ABI's tracking stock structure, including the possibility of creating two independent publicly traded companies in place of the Applied Biosystems and Celera business groups. Over the following months, representatives of Morgan Stanley discussed with the ABI Board a number of possible restructuring alternatives, including maintaining the corporation in its then current form, consolidating the two business groups, or splitting off or selling one of the business groups. On February 29, 2008, ABI announced that its Board of Directors had authorized management to pursue a possible separation of the Celera Group from ABI, and had authorized the filing on such date of a registration statement on Form S-1 with the Securities and Exchange Commission. On May 9, 2008, ABI announced that the ABI Board had given formal approval to the separation of ABI's Celera business group into an independent publicly traded company. This separation was to be effected by means of the redemption of all of the outstanding shares of Applera Corporation Celera Group common stock for shares of a newly formed corporation known as Celera Corporation that would hold all of the business assets and liabilities previously constituting the Celera business group. The separation was completed on July 1, 2008. The ABI Board determined to proceed with the separation of ABI's Celera business group based on the Board's belief that the separation of the Celera group and the elimination of ABI's tracking stock capital structure were in the best interests of ABI and all of its stockholders. The ABI Board's decision to proceed with the separation was independent of any decision to proceed with the merger or any other strategic transaction. The Form S-1 Registration Statement of Celera Corporation relating to the separation was filed with the SEC on February 29, 2008, and ABI's plans regarding the Celera separation had been substantially developed and were being implemented prior to ABI's April 2008 initial communications with Invitrogen regarding the merger, as described below.

The ABI Board, with the advice and assistance of Morgan Stanley, evaluated ABI's competitive position and the state of the industry in which ABI operates. Based on this review, on January 17, 2008, the ABI Board authorized Morgan Stanley to make inquiries of a limited number of companies that Morgan Stanley identified as likely to be interested in either a business combination with ABI, as a whole, or a business combination with the Applied Biosystems business group after giving effect to the separation of the Celera business group. During January and February 2008, representatives of Morgan Stanley contacted eight companies, not including Invitrogen, regarding their possible interest in a strategic transaction involving ABI, and two companies, which we refer to as Company X and Company Y, expressed interest in exploring a possible business combination.

During March 2008, ABI entered into confidentiality agreements with Company X and Company Y to facilitate the exchange of confidential information relating to the parties' businesses, and members of ABI's senior management met with members of the management of Company X and Company Y to give presentations regarding ABI and its businesses, and to allow these parties to engage in a preliminary evaluation of a possible business combination transaction. In early April, Company Y contacted ABI and indicated that it was not interested in pursuing a transaction. Also in early April, Morgan Stanley contacted Moelis, a financial advisor to Invitrogen, to gauge Invitrogen's interest in a possible transaction.

On April 10, 2008, ABI and Invitrogen entered into an Amended and Restated Joint-Non-Disclosure Agreement to allow each of the parties to evaluate confidential information about the other. Also on April 10, 2008, members of ABI's senior management met with members of Invitrogen senior management to give a presentation regarding ABI and its businesses, and to allow Invitrogen to engage in a preliminary evaluation of a possible business combination transaction. During the month of April, members of ABI's senior management

Table of Contents

continued to engage in preliminary business and financial due diligence discussions with members of Invitrogen's senior management.

On April 22, 2008, Company X sent a letter to Mr. Tony L. White, President and Chief Executive Officer of ABI and Chairman of the ABI Board, with an initial proposal for a business combination in a stock-for-stock transaction. Company X's proposal did not contain a specific purchase price, but instead indicated that the proposed transaction would include a modest premium over the then-current trading price of the Applied Biosystems stock.

On April 23, 2008, the Invitrogen Board held a meeting at which it discussed with members of Invitrogen senior management and representatives of Invitrogen's financial advisors, Moelis and UBS, their recent conversations with ABI concerning a possible business combination. Invitrogen senior management summarized Invitrogen's preliminary due diligence review of ABI. Invitrogen's financial advisors discussed with the Invitrogen Board financial aspects of a potential business combination with ABI, including potential revenue synergies and cost synergies anticipated by Invitrogen's management to result from the potential business combination. There was then a discussion of the parameters of a possible transaction. Following this discussion, the Invitrogen Board authorized Invitrogen's senior management to present a written proposal to ABI of Invitrogen's interest in pursuing a strategic business combination and to propose preliminary terms and conditions of such transaction including consideration in the form of both cash and Invitrogen common stock with a value between \$37.00 and \$40.00 per share of Applied Biosystems stock.

On April 24, 2008, Mr. Gregory T. Lucier, Chief Executive Officer of Invitrogen and Chairman of the Invitrogen Board, sent a letter to Mr. White in which Mr. Lucier expressed Invitrogen's interest in pursuing a strategic business combination with ABI, subject to a number of conditions. Under the terms of the proposed transaction, holders of Applied Biosystems stock would receive consideration in the form of both cash and Invitrogen common stock with a value of between \$37.00 and \$40.00 per share of Applied Biosystems stock. In addition, Mr. Lucier emphasized his belief that there was a compelling rationale for a business combination between Invitrogen and ABI.

On April 26, 2008, the ABI Board met with senior management and ABI's outside legal advisor, Skadden, Arps, Slate, Meagher & Flom LLP, which is referred to as Skadden Arps, and ABI's financial advisor, Morgan Stanley, to consider the proposals received from Invitrogen and Company X and to determine whether ABI had an interest in pursuing either transaction. Representatives of Morgan Stanley discussed the process it had followed since the ABI Board's meeting in January, and a representative of Skadden Arps discussed the ABI Board's fiduciary duties to stockholders in the context of a strategic transaction involving ABI. During this meeting, the ABI Board determined to form a negotiating committee of the ABI Board to be comprised of independent members of the ABI Board, which we refer to as the Negotiating Committee, that would be authorized to evaluate, explore, and negotiate, in consultation with the full ABI Board, the proposals of Invitrogen and Company X. The ABI Board appointed Messrs. William H. Longfield, Theodore E. Martin, and James R. Tobin as members of the Negotiating Committee. The Negotiating Committee then authorized Mr. White to continue to engage in discussions with Invitrogen regarding the proposed transaction.

On May 2, 2008, the ABI Board met with ABI's senior management and its outside legal and financial advisors to discuss the proposed business combinations with Invitrogen and Company X. Mr. White advised the full ABI Board of the status of negotiations regarding the two proposals. Representatives of Morgan Stanley discussed with the ABI Board financial information relating to both Invitrogen and Company X. The ABI Board considered the potential strategic benefits and challenges of each proposal and determined to explore Invitrogen's proposal more fully. In this regard, the ABI Board determined that completion of a transaction with Company X could be more difficult given potential regulatory concerns and that the modest premium associated with the Company X proposal and the lack of clarity regarding the proposal's terms made the Company X proposal not sufficiently attractive to pursue at that time.

Table of Contents

On May 13, 2008, representatives of ABI's senior management made a presentation regarding ABI's businesses to Invitrogen's prospective financing sources for the transaction. Senior management of ABI also attended a similar presentation regarding Invitrogen's businesses given by Invitrogen management to prospective financing sources.

On May 14, 2008, Skadden Arps distributed a draft merger agreement to counsel for Invitrogen, DLA Piper LLP (US), which is referred to as DLA Piper. The draft merger agreement provided for a merger of ABI with and into a newly formed, wholly-owned limited liability company subsidiary of Invitrogen, with the merger subsidiary continuing as the surviving company. During the period from May 14, 2008, through June 11, 2008, representatives of ABI and Invitrogen exchanged drafts of the merger agreement and negotiated the terms and conditions of the agreement.

Also on May 14, 2008, each of ABI and Invitrogen gave the other access to its online data site containing extensive legal, financial, business and accounting due diligence information regarding the respective companies. During the remainder of the month of May and through June 11, 2008, ABI and Invitrogen each made available to the other legal and business due diligence materials, and ABI and Invitrogen conducted detailed business, financial, accounting, and legal due diligence investigations. During this time, members of the senior management of ABI and Invitrogen held discussions regarding their companies' respective businesses and made and responded to requests for additional due diligence information.

Because Morgan Stanley, or one of its affiliates, was considering a role in the financing of the proposed transaction, the ABI Board determined to retain Greenhill to render an opinion to the ABI Board as to the fairness, from a financial point of view, of the consideration to be received by the holders of Applied Biosystems stock in the proposed transaction with Invitrogen.

On May 30, 2008, Mr. Lucier and Mr. White discussed the terms and structure of the proposed merger between ABI and Invitrogen. During this discussion, Mr. Lucier indicated that Invitrogen was unable to pay more than \$38.00 per share of Applied Biosystems stock.

On May 31, 2008, the Negotiating Committee met to receive an update from Mr. White regarding the status of the proposed transaction. Also at this meeting, representatives of Morgan Stanley reviewed with the Negotiating Committee the status of the discussions with Company X, which had indicated that it remained interested in pursuing a transaction with ABI at a modest premium to the then-current trading price of Applied Biosystems stock, but acknowledged the complications that such a transaction might entail because of regulatory concerns. After further discussion, the Negotiating Committee determined to authorize continued negotiation of the transaction with Invitrogen. At the direction of the Negotiating Committee, Morgan Stanley contacted Moelis to inform Moelis of the Negotiating Committee's determination.

On June 8, 2008, the Invitrogen Board met to further consider the proposed transaction. Present at the meeting were members of Invitrogen senior management and representatives of DLA Piper, Moelis and UBS. DLA Piper led the Invitrogen Board in a review of the Invitrogen Board's fiduciary and other legal duties in light of the possible transaction. Invitrogen senior management described the current status of negotiations with ABI, including, among other things, the proposed terms of the transaction and the potential benefits and risks of the transaction to Invitrogen and its stockholders. DLA Piper reviewed with the Invitrogen Board the terms of the draft merger agreement. Invitrogen senior management and DLA Piper next reviewed with the Invitrogen Board the preliminary proposals for providing debt financing for the cash portion of the consideration to be paid in the transaction and transaction expenses. Invitrogen senior management updated the Invitrogen Board on the due diligence investigation and provided the Invitrogen Board with a preliminary financial overview of the transaction, including the process undertaken by Invitrogen to attempt to quantify certain benefits of the transaction. Invitrogen's financial advisors updated the Invitrogen Board on the status of their financial review and evaluation of the proposed transaction consideration from a financial perspective. Following these discussions, the Invitrogen Board authorized further negotiations with ABI with respect to the proposed transaction.

Table of Contents

On June 9, 2008, Invitrogen distributed to ABI an initial draft of the commitment letter that Invitrogen had obtained from its financing sources in connection with the proposed transaction. Thereafter, ABI and Invitrogen and their respective legal advisors discussed and proposed to Invitrogen's potential financing sources revisions to the financing commitment letter.

Also on June 9, 2008, the ABI Board met with ABI's senior management and outside legal and financial advisors to discuss the proposed merger between ABI and Invitrogen. The ABI Board received an update regarding the status of negotiations with Invitrogen. Members of ABI's senior management reviewed the progress of the negotiations with Invitrogen, reported on ABI's due diligence investigation of Invitrogen and Invitrogen's due diligence investigation of ABI, and discussed with the ABI Board the risks, benefits, and prospects associated with a transaction with Invitrogen based on the terms outlined in the proposed merger agreement. Representatives of Morgan Stanley reviewed with the ABI Board certain aspects of the proposed transaction, including a discussion of certain financial information regarding ABI and Invitrogen, their respective peer companies, and certain comparable transactions. Representatives of Greenhill reviewed with the ABI Board certain financial aspects of the proposed transaction. A representative of Skadden Arps discussed with the ABI Board the legal standards applicable to the ABI Board's evaluation of the proposed transaction, including an overview of the ABI Board's fiduciary duties, and reviewed with the ABI Board the terms of the proposed merger agreement. The ABI Board then met in executive session to discuss the proposed transaction.

On June 10 and June 11, 2008, ABI and Invitrogen, with the assistance of their respective outside legal and financial advisors, continued to negotiate the terms and conditions of the merger agreement and the proposed merger, including the amount of the termination fee and the range of Invitrogen's stock price within which the merger consideration would be calculated.

On June 11, 2008, the Invitrogen Board met to further consider the proposed merger. Also present at the meeting were members of Invitrogen senior management and representatives of DLA Piper, Moelis and UBS. DLA Piper reviewed with the Invitrogen Board its fiduciary duties. Invitrogen senior management then updated the Invitrogen Board on negotiations with ABI since the June 8, 2008 Invitrogen Board meeting. Invitrogen senior management and DLA Piper reviewed with the Invitrogen Board the structure and terms of the proposed merger and the form and amount of consideration that would be received by Applied Biosystems stockholders in the transaction. Invitrogen senior management, DLA Piper, Moelis and UBS then reviewed the terms of a proposed commitment letter provided to Invitrogen by Bank of America, BAS, UBS, UBS Finance and MSSF with respect to debt financing to finance the cash portion of the merger consideration and transaction costs. Moelis and UBS next reviewed with the Invitrogen Board Moelis' and UBS' joint financial analysis of the merger consideration to be paid in the aggregate by Invitrogen and each orally delivered to the Invitrogen Board its opinion, which was confirmed by delivery of a written opinion dated June 11, 2008, to the effect that, as of June 11, 2008 and subject to and based on the various assumptions made, procedures followed, matters considered and limitations described in such opinion, the merger consideration to be paid in the aggregate by Invitrogen was fair, from a financial point of view, to Invitrogen. After considering the foregoing, the Invitrogen Board unanimously determined that the merger, the terms of the merger agreement and the transactions contemplated by the merger agreement were advisable and fair to, and in the best interest of, Invitrogen and declared the merger to be advisable, approved the merger agreement, resolved to recommend that the Invitrogen stockholders approve the issuance of shares of Invitrogen common stock in connection with the transaction and directed that the proposal for the issuance of Invitrogen common stock be submitted to Invitrogen stockholders at a meeting of Invitrogen shareholders. In addition, the Invitrogen Board approved an amendment to the restated certificate of incorporation to increase the number of authorized shares of common stock. The Invitrogen Board also approved the financing commitment letter.

On June 11, 2008, the ABI Board met with ABI's senior management and its outside legal and financial advisors. Representatives of Morgan Stanley and Greenhill reviewed the structure and terms of the proposed transaction and certain financial information regarding ABI and Invitrogen. Each of Morgan Stanley and Greenhill separately rendered to the ABI Board its oral opinion (subsequently confirmed in writing), as described

Table of Contents

in the section of this joint proxy statement/prospectus captioned "Opinion of ABI's Financial Advisors," that, as of June 11, 2008, and subject to and based upon the various assumptions made, procedures followed, matters considered and limitations described in such opinion, the consideration to be received by the holders of Applied Biosystems stock (other than, in the case of Morgan Stanley, Invitrogen, Atom Acquisition or any subsidiary of ABI, or, in the case of Greenhill, Invitrogen, Atom Acquisition and their respective affiliates), as provided for in the merger agreement, was fair, from a financial point of view, to such holders. Representatives of Skadden Arps discussed with the ABI Board its fiduciary duties with respect to the transaction and reviewed the terms of the final merger agreement. Following these discussions, and after further review and discussion of, among other things, the factors set forth in the section of this joint proxy statement/prospectus captioned

ABI's Reasons for the Merger and Recommendation of ABI's Board of Directors, the ABI Board determined, by a unanimous vote of those present (with the exception of Mr. White, who abstained from voting on the merger because of potential conflicts of interests; see the section entitled "Interests of ABI's Directors and Executive Officers in the Merger"), that the merger and the transactions contemplated by the merger agreement were advisable and in the best interests of ABI and its stockholders, and the ABI Board voted to approve the merger and to approve and adopt the merger agreement.

Following the meetings of the Invitrogen Board and the ABI Board on June 11, 2008, the parties executed the merger agreement. The transaction was announced on the morning of June 12, 2008, in a press release issued jointly by ABI and Invitrogen.

On September 9, 2008, Invitrogen and ABI entered into an amendment to the merger agreement to: (1) adjust the ratio by which each option to purchase shares of Applied Biosystems common stock will become exercisable for shares of Invitrogen common stock in order to give holders of such options the benefit of any cash adjustment to the merger consideration received by Applied Biosystems stockholders who receive all or a portion of the merger consideration in the form of Invitrogen common stock; (2) clarify certain terms of the merger agreement relating to ABI's Incentive Compensation Program for the fiscal year ending June 30, 2009; and (3) provide that the name of the surviving company may be either Applied Biosystems Inc. or another name mutually acceptable to Invitrogen and ABI to be selected prior to the time of the merger; and (4) delete the requirement that each of ABI and Invitrogen provide the other with comfort letters from their respective accountants as of the date on which the registration statement of which this joint proxy statement/prospectus forms a part becomes effective.

Invitrogen's Reasons for the Merger and Recommendation of the Invitrogen Board

At its June 11, 2008, meeting, the members of the Invitrogen Board unanimously approved and adopted the merger agreement and the transactions contemplated by it and recommended that the Invitrogen stockholders approve the issuance of Invitrogen common stock to Applied Biosystems stockholders pursuant to the merger and the amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized common shares from 200,000,000 to 400,000,000 and any adjournments of the Invitrogen special meeting of stockholders, if necessary, to solicit additional proxies. The Invitrogen Board believes that the merger agreement and the terms of the merger are fair to, and in the best interest of, Invitrogen and its stockholders. Therefore, the Invitrogen Board recommends that the Invitrogen stockholders vote to approve the issuance of Invitrogen common stock to Applied Biosystems stockholders and the amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized common shares.

In evaluating the merger, the Invitrogen Board consulted with senior members of Invitrogen's management team and Invitrogen's advisors regarding, among other things, the past and current business operations, financial condition and future prospects of ABI, the strategic, governance and operational aspects of combining Invitrogen and ABI and financial and legal aspects of the transaction. The Invitrogen Board also consulted with representatives of DLA Piper regarding legal due diligence matters and the terms of the merger agreement.

In reaching its decision to approve the merger, the Invitrogen Board considered a variety of factors related to the transaction, a number of which are summarized below:

Highly Complementary, Best-In-Class Product Offerings. The Invitrogen Board believed that the combined company would have highly recognizable brands in core structural and functional genomic

Table of Contents

product areas, cell biology, proteomics and other mass spectrometry-based applications, as well as foundational tools such as transfection reagents, antibodies, fluorescent technologies, and cell culture reagents. The Invitrogen Board believed that these products, along with ABI's systems integration capabilities, would serve as the basis for developing new high-performance workflow solutions for customers. Furthermore, the Invitrogen Board considered that the combined company would have significant research and development resources and a sizable intellectual property estate of over 3,600 patents and licenses;

Broad and Extensive Commercial Organization. The Invitrogen Board considered that the combined company would join together two broad and extensive commercial networks in life sciences. The combined company will have a team of approximately 3,000 sales and service employees who serve customers in more than 100 countries worldwide and strong customer connections. The board of directors noted that these employees will be positioned to capture cross-selling opportunities. Furthermore, the Invitrogen Board believed that ABI's businesses would benefit from utilizing Invitrogen's industry-leading e-commerce systems and its network of onsite supply centers;

Cost Savings and Operational Efficiencies. The Invitrogen Board considered that, while no assurance could be given that any particular level of savings could be achieved, management anticipated that there would be significant cost savings within three years of completion of the merger. Management expects to realize these cost savings through enhanced sourcing and logistics efficiencies, site rationalization to achieve production scale, research and development optimization and overhead synergies. The combined company's ability to achieve these savings will be subject to various factors, many of which will be beyond its control, including economic conditions and unanticipated changes in business conditions;

Strong Platform for Expansion into New, High Growth Markets. The Invitrogen Board believed that Invitrogen and ABI would be positioned to compete in several rapidly growing markets, such as next generation sequencing, cell biology, applied markets and emerging geographies, by combining Invitrogen's consumables content and chemistry core competencies and ABI's systems expertise and strong presence in applied markets;

Operating Income from Revenue Synergies. The Invitrogen Board considered increases in operating income that management expects to achieve through cross-selling and channel opportunities, penetration and access to new markets and new joint products. While management expects increases in operating income attributable to the combination to grow significantly within three years of the completion of the merger, there cannot be any assurance that any particular level of increase can be attained and the combined company's ability to achieve these increases will be subject to various factors, many of which will be beyond its control, including economic conditions and unanticipated changes in business conditions.; and

Opinions of Financial Advisors. The Invitrogen Board, with the assistance of Invitrogen's financial advisors, evaluated the merger consideration to be paid in the aggregate by Invitrogen and received separate written opinions, each dated June 11, 2008, from Invitrogen's financial advisors as to the fairness, from a financial point of view and as of the date of such opinions, to Invitrogen of such merger consideration, as more fully described below under Opinions of Invitrogen's Financial Advisors.

Terms of the Merger Agreement. The Invitrogen Board, with the assistance of counsel, considered the general terms of the merger agreement, including:

Fixed Exchange Ratio. The Invitrogen Board considered the fact that the fixed exchange ratio provides certainty as to the maximum amount of cash and number of shares of Invitrogen common stock to be delivered to Applied Biosystems stockholders and the percentage of the total shares of Invitrogen common stock that current Applied Biosystems stockholders will own after the merger. The Invitrogen Board also considered the premium over the historical trading prices of Applied Biosystems stock implied by the value of the merger consideration;

Table of Contents

No Solicitation; Termination Fee. The Invitrogen Board reviewed the provisions of the merger agreement that limit the ability of Invitrogen and ABI to solicit other acquisition offers and require each party to pay a termination fee to the other party under specified circumstances. The Invitrogen board of directors believed that these provisions were reasonable under the circumstances;

Conditions to Consummation. The Invitrogen Board reviewed with counsel the conditions to consummation of the merger, in particular the likelihood of obtaining the necessary regulatory approvals and stockholder approvals, and the likelihood that the merger would be completed. While the Invitrogen Board believes that these approvals will be obtained in a timely fashion, the Invitrogen board of directors also noted that Invitrogen may be required, under certain circumstances, to agree to divestitures or other restrictions on the operation of the business of the combined company; and

Tax Treatment. The Invitrogen Board also considered the expected qualification of the merger as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code, resulting in the common stock portion of the merger consideration being received by Applied Biosystems stockholders tax-free for federal income tax purposes.

In addition, the Invitrogen Board also identified and considered a variety of potentially negative factors in its deliberations concerning the merger, including:

the possibility that the incremental debt associated with the merger could cause Invitrogen to have reduced financial flexibility;

the ability of Invitrogen to obtain the necessary financing to pay the cash portion of the merger consideration, and the terms on which financing could be obtained, which was addressed by obtaining a commitment letter from Bank of America, UBS Finance, UBS, and MSSF to provide debt financing, considering that certain terms may ultimately be less favorable than anticipated;

the risk that the potential benefits sought in the merger might not be fully realized, which was evaluated in light of Invitrogen's history related to integrating prior significant acquisitions, and after consideration of potential issues that could arise;

the possibility that the merger might not be completed due to difficulties in attracting sufficient stockholder approval, obtaining regulatory clearance or the occurrence of a material adverse change in either company's business, or that completion might be unduly delayed by regulatory authorities withholding consent or seeking to block the merger;

the effect of public announcement of the merger on Invitrogen's stock price if Invitrogen stockholders or Applied Biosystems stockholders do not view the merger positively;

the fact that the merger agreement did not contain a financing condition, which might expose Invitrogen to significant liability if it were obligated to close the merger but were unable to obtain the financing despite having written financing commitments;

the risk that governmental entities may require that Invitrogen and/or ABI divest certain assets in order to obtain approval for the merger, which Invitrogen management believed was likely to occur, if at all, only with respect to a small portion of Invitrogen's and ABI's combined business;

the substantial charges to be incurred in connection with the merger, including costs of integrating the businesses of Invitrogen and ABI and transaction expenses arising from the merger;

Edgar Filing: INVITROGEN CORP - Form S-4/A

the risks associated with certain litigation in which ABI is currently involved;

the restrictions on the conduct of Invitrogen's business during the period between the signing of the merger agreement and the completion of the merger, which was not identified as a significant concern given the nature of the restrictions; and

other risks associated with ABI's business generally, many of which Invitrogen believed were similar to risks inherent in Invitrogen's business.

Table of Contents

The Invitrogen Board concluded that these factors could be managed or mitigated by Invitrogen or were unlikely to have a material impact on the merger or Invitrogen, and that, overall, the potentially negative factors associated with the merger were outweighed by the potential benefits of the merger.

It was not practical to, and thus the Invitrogen Board did not, quantify, rank or otherwise assign relative weights to the wide variety of factors it considered in evaluating the merger and the merger agreement, nor did the board of directors determine that any one factor was of particular importance in deciding that the merger agreement and associated transactions were advisable, fair to, or in the best interests of Invitrogen and its stockholders. This discussion of information and material factors considered by the Invitrogen Board is intended to be a summary rather than an exhaustive list. In considering these factors, individual members of the Invitrogen Board may have given different weight to different factors. The Invitrogen Board conducted an overall analysis of the factors described above, and considered as a whole the factors to support its decision in favor of the merger and the merger agreement. The decision of each member of the Invitrogen Board was based upon his or her own judgment, in light of all of the information presented, regarding the overall effect of the merger agreement and associated transactions on Invitrogen's stockholders as compared to any potential alternative courses of action. After considering this information, all members of the Invitrogen Board unanimously approved the merger agreement and the transactions contemplated by the merger agreement, including the merger, and recommended that Invitrogen's stockholders approve the issuance of shares of Invitrogen common stock pursuant to the merger agreement and the amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized shares of Invitrogen common stock.

ABI's Reasons for the Merger and Recommendation of ABI's Board of Directors

On June 11, 2008, the ABI Board, after careful consideration, including consultation with ABI management, its outside legal advisors, and its financial advisors, determined, by a unanimous vote of those present (with the exception of Mr. White, who abstained from voting on the merger), that the merger of ABI into a wholly-owned subsidiary of Invitrogen, and the other transactions contemplated by the merger agreement, was advisable and in the best interests of ABI and its stockholders and approved and adopted the merger agreement and the merger. **THE BOARD OF DIRECTORS OF ABI RECOMMENDS THAT THE APPLIED BIOSYSTEMS STOCKHOLDERS VOTE FOR THE APPROVAL AND ADOPTION OF THE MERGER AGREEMENT AND THE MERGER AT THE APPLIED BIOSYSTEMS SPECIAL MEETING.**

In the course of reaching its decision to approve the merger, to approve and adopt the merger agreement, and to recommend that Applied Biosystems stockholders vote to approve and adopt the merger agreement and the merger, the ABI Board carefully considered a number of factors, including the following material factors.

Premium

The consideration to be paid to Applied Biosystems stockholders represents a value of \$38.00 per share if the twenty-day volume-weighted average price of Invitrogen's common stock is in the range of \$43.69 to \$46.00 three business days prior to the close of the transaction. The total value per share will differ if Invitrogen's twenty-day volume-weighted average price is above or below that range, measured shortly prior to the close of the transaction. The value of \$38.00 per share represents a premium of approximately:

17% over the closing price of Applied Biosystems stock of \$32.44 on June 11, 2008, the day on which the ABI Board approved the merger agreement;

12% over the average closing price of Applied Biosystems stock in the 30 trading days preceding June 11, 2008;

15% over the closing price of Applied Biosystems stock of \$32.99 on January 17, 2008, the day on which the ABI Board authorized Morgan Stanley to make inquiries of companies identified as likely to be interested in a business combination;

Table of Contents

16% over the average closing price of Applied Biosystems stock of \$32.83 during the three months preceding the announcement of the merger agreement; and

16% over the average closing price of Applied Biosystems stock of \$32.82 during the six months preceding the announcement of the merger agreement.

Cash/Stock Election

The cash/stock election feature of the merger consideration offers Applied Biosystems stockholders the opportunity, on the one hand, to participate in the potential growth and success of the combined company through the stock component of the merger consideration and, on the other hand, to realize immediate value for a significant portion of their investment through the cash component of the merger consideration.

Strategic Considerations

The ABI Board believes that the merger with Invitrogen represents the combination of a premier instruments provider with a premier consumables provider that will create a global leader in biotechnology reagents and systems. The combined company is expected to generate approximately \$3.5 billion in combined annual sales, with significant commercial, operational, and technical scale. The combined company will have a major presence in key growth markets and exceptional technical capabilities in the areas of genetic analysis, proteomics, cell biology, and cell systems. Because part of the consideration to be received by Applied Biosystems stockholders will consist of Invitrogen's common stock, Applied Biosystems stockholders will participate in the upside potential of the combined company.

The ABI Board believes that the combined company will offer highly complementary product offerings, with greater than 70% of its revenue generated from consumables and services. In this regard, the ABI Board noted that Invitrogen and ABI have highly recognizable brands in core structural and functional genomic product areas, cell biology, proteomics, and other mass spectrometry-based applications, as well as foundational tools such as transfection reagents, antibodies, fluorescent technologies, and cell culture reagents.

With an intellectual property portfolio of over 3,600 patents and licenses, the ABI Board believes that the combined company will have significant research and development capabilities to accelerate life science discovery.

The ABI Board believes that the combined company will have an expanded commercial organization poised to provide customers with enhanced solutions and service offerings. In this regard, the ABI Board noted that the combined company will have approximately 3,000 sales and service employees and serve customers in more than 100 countries worldwide.

After reviewing ABI's potential strategic alternatives to the merger with Invitrogen, including a merger or other strategic transaction with another third party, a sale of one or more of ABI's businesses, whether alone or in conjunction with certain acquisitions, and the viability and prospects of ABI as a stand-alone entity, and taking into account the preliminary discussions with other third parties that were contacted by Morgan Stanley to solicit their potential interest in a strategic transaction with ABI (see the section entitled

Background of the Merger), the ABI Board concluded that it was unlikely that another party would make or accept an offer to engage in a transaction with ABI that would be more favorable to ABI and its stockholders than the merger with Invitrogen, and that the merger with Invitrogen was the best available strategic alternative for ABI under the circumstances.

Terms of the Merger Agreement

Limited Conditions: The ABI Board noted that the parties' respective obligations to complete the merger are subject to limited conditions. Specifically, there is no financing contingency. See the section of this joint proxy statement / prospectus captioned "The

Edgar Filing: INVITROGEN CORP - Form S-4/A

Merger Agreement Conditions to Completion of the Merger.

Table of Contents

Ability to Accept a Superior Proposal: The ABI Board noted that under certain circumstances and subject to certain conditions more fully described in the section entitled *The Merger Agreement Invitrogen and ABI Prohibited from Soliciting Other Officers*, representatives of ABI can furnish non-public information and engage in discussions or negotiations with a third party in connection with an unsolicited proposal for a business combination with ABI that is determined to be, or, in the good faith determination of the ABI Board, is reasonably likely to become, a superior proposal. ABI can also terminate the merger agreement in order to enter into an agreement regarding a superior proposal, subject to complying with the terms of the merger agreement. See the section entitled *The Merger Agreement Termination of the Merger Agreement*.

Ability to Change Board Recommendation: The ABI Board noted under certain circumstances and subject to certain conditions more fully described in the section of this joint proxy statement/prospectus captioned *The Merger Agreement Recommendations of the Board of Directors*, the ABI Board may change its recommendation with respect to the merger agreement and the merger before stockholders approve the merger if it concludes in good faith, after consultation with its financial advisors and outside legal advisors, that the failure to take such action would be inconsistent with its fiduciary duties under applicable law.

Representation on Invitrogen's Board of Directors: The ABI Board noted that Invitrogen has agreed to expand the size of its board of directors to 12 members and to appoint three members of the ABI Board to the Invitrogen Board after the closing of the merger. Invitrogen's expanded board is expected to provide a degree of continuity and involvement by ABI's directors in the combined company following the merger.

Ability to Specifically Enforce the Merger Agreement or Pursue Damages: The ABI Board noted that ABI may specifically enforce the merger agreement or pursue damages against Invitrogen in the event of any intentional breach of the merger agreement, fraud, wrongful repudiation or termination of the merger agreement by Invitrogen, including the right to pursue damages on behalf of Applied Biosystems stockholders for the loss of the merger consideration in the event of a wrongful failure by Invitrogen to consummate the merger.

Likelihood of Completion

After reviewing the terms of the merger agreement with ABI's outside legal advisors, the ABI Board believes that the nature and relatively limited number of conditions to the completion of the merger, and the strength of Invitrogen's obligations to fulfill those conditions, increases the likelihood that the merger will be completed (see the sections of this joint proxy statement/prospectus captioned *Conditions to Completion of the Merger* and *Regulatory Approvals*). The ABI Board also believes that, in light of the financial resources of Invitrogen and ABI and the financing commitments that Invitrogen has obtained from Bank of America, BAS, UBS, UBS Finance, and MSSF, Invitrogen will be able to finance the proposed transaction.

Ownership of Combined Company after Merger

Applied Biosystems stockholders will own a significant equity stake in the combined company after completion of the merger. Immediately after the merger, the Applied Biosystems stockholders will own approximately 45%, and Invitrogen's stockholders will own approximately 55% of the then-outstanding shares of common stock of the combined company, in each case on a fully-diluted basis.

Tax-Free Exchange

The merger is expected to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, and the rules and regulations promulgated thereunder, generally resulting in the merger being tax-free to holders of Applied Biosystems stock to the extent they receive Invitrogen common stock pursuant to the merger and taxable to holders of Applied Biosystems stock to the extent they receive cash consideration.

Table of Contents

Opinions of Financial Advisors

Each of Morgan Stanley and Greenhill made financial presentations and separately gave its oral opinion to the ABI Board on June 11, 2008, subsequently confirmed in writing, that, as of June 11, 2008, and based on and subject to the various assumptions made, procedures followed, matters considered and limitations described in their respective opinions, the consideration to be received by the holders of Applied Biosystems stock (other than, in the case of Morgan Stanley, Invitrogen, Atom Acquisition or any subsidiary of ABI, or, in the case of Greenhill, Invitrogen, Atom Acquisition, LLC and their respective affiliates), as provided for in the merger agreement, was fair, from a financial point of view, to such holders.

Risks Considered by the ABI Board

The ABI Board also considered the following potentially negative factors associated with the merger:

the risks that the potential benefits sought in the merger, including expected synergies, might not be fully realized;

the risk that, despite the efforts of the combined company, key employees might not remain employed by the combined company;

the fact that Invitrogen will be more highly leveraged after giving effect to the financing necessary to complete the merger, which may cause the combined company to have reduced financial flexibility for a period of time following the closing;

the risk that, notwithstanding the likelihood of completion, the merger might not be completed, and the failure to complete the merger may have an adverse effect on the trading price of Applied Biosystems stock, ABI's operating results, including as a result of the costs incurred in connection with the merger, and ABI's ability to attract and retain customers and key personnel;

the risk that, because the stock portion of the merger consideration is a fixed ratio of shares of Invitrogen common stock to Applied Biosystems stock and the merger agreement provides holders of Applied Biosystems stock with only limited protection against a decline in the trading price of Invitrogen's common stock, Applied Biosystems stockholders could be adversely affected by a decrease in the trading price of Invitrogen's common stock during the pendency of the merger;

the possibility that holders of Applied Biosystems stock who elect cash, stock, or a mix of cash and stock will not receive the exact form of merger consideration they elected because the merger agreement requires that the merger consideration be prorated if necessary;

the possibility that the Department of Justice, Federal Trade Commission, or some state or foreign regulatory authority might seek to impose conditions on or enjoin or otherwise prevent or delay the merger, which possibility the ABI Board considered to be low;

the potential that ABI could be delayed or prevented from pursuing business opportunities that may arise prior to the merger because the merger agreement contains restrictions on ABI's ability to conduct its business during the pendency of the merger;

the requirement that, if ABI terminates the merger agreement under certain circumstances, ABI will be required to pay Invitrogen a termination fee of \$150 million; and

Edgar Filing: INVITROGEN CORP - Form S-4/A

the other risks of the type and nature described in the section of this joint proxy statement/prospectus captioned Risk Factors. In addition, the ABI Board was aware of and considered the interests that certain of its directors and executive officers may have with respect to the merger that differ from, or are in addition to, their interests as stockholders of ABI generally, as described in the section entitled Interests of ABI's Directors and Executive Officers in the Merger .

Table of Contents

After consideration of these material factors, the ABI Board determined that these risks were outweighed by the potential benefits of the merger. This discussion of the information and factors considered by the ABI Board is not intended to be exhaustive and may not include all of the factors considered. In reaching its determination to approve and recommend the merger agreement and the transactions contemplated by the merger agreement, including the merger, the ABI Board did not quantify or assign any relative or specific weights to the various factors that it considered in reaching its determination that the merger agreement and the transactions contemplated by the merger agreement, including the merger, are advisable and in the best interests of ABI and its stockholders. Rather, the ABI Board viewed its position and recommendation as being based on an overall analysis and on the totality of the information presented to and factors considered by it.

Opinions of Invitrogen's Financial Advisors

Opinion of Moelis & Company LLC

On June 11, 2008, at a meeting of Invitrogen's board of directors held to evaluate the proposed merger, Moelis delivered its oral opinion to Invitrogen's board of directors, which was subsequently confirmed in its written opinion dated June 11, 2008, that, as of such date, and based upon and subject to the factors and assumptions set forth therein, the aggregate merger consideration payable by Invitrogen pursuant to the merger agreement was fair, from a financial point of view, to Invitrogen.

Moelis' opinion does not address Invitrogen's underlying business decision to effect the merger or the relative merits of the merger as compared to any alternative business strategies or transactions that might be available to Invitrogen, and does not constitute a recommendation to any stockholder of Invitrogen as to how such stockholder should vote or act with respect to the merger. At Invitrogen's direction, Moelis was not asked to, nor did it, offer any opinion as to the material terms of the merger agreement (other than the merger consideration to the extent expressly specified in Moelis' opinion), the Celera separation agreement or the form of the merger. Moelis expressed no opinion as to what the value of Invitrogen common stock will be when issued pursuant to the merger agreement or the prices at which it or Applied Biosystems stock will trade at any time. In rendering its opinion, Moelis assumed, with Invitrogen's consent, that (1) Invitrogen, the wholly owned subsidiary of Invitrogen party to the merger agreement and ABI will comply with all the material terms of the merger agreement, (2) Celera and ABI will comply with all the material terms of the Celera separation agreement, and (3) the merger and all related transactions, including, without limitation, the Celera separation, will be consummated in accordance with the terms of the merger agreement, the Celera separation agreement and the related documents, as applicable, in each case without any adverse waiver or amendment of any material term or condition thereof.

In arriving at its opinion, Moelis, among other things:

reviewed certain publicly available business and financial information relating to ABI and Invitrogen that Moelis deemed relevant;

reviewed certain internal information relating to the businesses of ABI and Invitrogen, including financial forecasts and estimates, as well as the amount and timing of the cost savings, synergies and related expenses expected to result from the merger, or the Expected Synergies;

conducted discussions with members of senior management and representatives of ABI and Invitrogen concerning the matters described above, as well as their respective businesses and prospects before and after giving effect to the merger, the Celera separation and the Expected Synergies;

reviewed publicly available financial and stock market data, including valuation multiples, for ABI and Invitrogen and compared them with those of certain other companies in lines of business that Moelis deemed relevant;

compared the proposed financial terms of the merger with the financial terms of certain other transactions that Moelis deemed relevant;

Table of Contents

considered certain potential pro forma effects of the merger;

reviewed the merger agreement;

reviewed the Celera separation agreement;

participated in certain discussions and negotiations among representatives of ABI and Invitrogen and their financial and legal advisors; and

conducted such other financial studies and analyses and took into account such other information as Moelis deemed appropriate. In connection with its review, Moelis did not assume any responsibility for independent verification of any of the information supplied to, discussed with, or reviewed by it for the purpose of its opinion and relied, with Invitrogen's consent, on such information being complete and accurate in all material respects. In addition, at Invitrogen's direction Moelis did not make any independent evaluation or appraisal of any of the assets or liabilities (contingent, derivative, off-balance-sheet, or otherwise) of ABI or Invitrogen, nor was Moelis furnished with any such evaluation or appraisal. With respect to the forecasted financial information and Expected Synergies referred to above, Moelis assumed, with Invitrogen's consent, that they were reasonably prepared on a basis reflecting the best currently available estimates and judgments of the management of ABI or Invitrogen as to the future performance of their respective companies and that such future financial results will be achieved at the times and in the amounts projected by management. Moelis relied, at Invitrogen's direction, without independent verification, upon the assessment of the management of Invitrogen of the potential tax liability to be incurred by ABI as a result of the Celera separation.

Moelis' opinion is necessarily based on economic, monetary, market and other conditions as in effect on, and the information made available to it as of, the date thereof. Without limiting the foregoing, Moelis' analysis was based on the merger agreement as in effect on June 11, 2008. Moelis assumed, with Invitrogen's consent, that all governmental, regulatory or other consents and approvals necessary for the consummation of the merger and all related transactions will be obtained without the imposition of any delay, limitation, restriction, divestiture or condition that would have an adverse effect on ABI or Invitrogen or on the expected benefits of the merger.

Moelis provided its opinion for the use and benefit of the board of directors of Invitrogen in its evaluation of the merger. Invitrogen did not ask Moelis to address, and its opinion does not address, the fairness to, or any other consideration of, the holders of any class of securities, creditors or other constituencies of Invitrogen. In addition, Moelis did not express any opinion as to the fairness of the amount or nature of any compensation to be received by any of ABI's officers, directors or employees, or any class of such persons, relative to the merger consideration. The Fairness Opinion and Valuation Review Committee of Moelis approved the issuance of the opinion.

The full text of the written opinion of Moelis, dated June 11, 2008, which sets forth the assumptions made, procedures followed, matters considered and limitations on the review undertaken in connection with the opinion, is attached as Annex C to this joint proxy statement/prospectus and is incorporated by reference into this joint proxy statement/prospectus. Holders of Invitrogen common stock are encouraged to read Moelis' opinion carefully in its entirety.

Under the terms of Moelis' engagement, Invitrogen has agreed to pay Moelis for its financial advisory services in connection with the merger an aggregate fee of \$10 million, a portion of which was payable in connection with Moelis' opinion and a significant portion of which is contingent upon consummation of the merger. In addition, Invitrogen has agreed to reimburse Moelis for its reasonable expenses, including fees, disbursements and other charges of counsel, and to indemnify Moelis and related parties against liabilities relating to, or arising out of, its engagement.

Invitrogen selected Moelis as its financial advisor in connection with the merger because Moelis is an internationally recognized investment banking firm whose personnel have substantial experience in similar

Table of Contents

transactions. Moelis is regularly engaged in the valuation of businesses and their securities in connection with mergers and acquisitions, leveraged buyouts, competitive bids, secondary distributions of listed and unlisted securities and private placements.

Opinion of UBS Securities LLC

On June 11, 2008, at a meeting of Invitrogen's board of directors held to evaluate the proposed merger, UBS delivered to Invitrogen's board of directors an oral opinion, which opinion was confirmed by delivery of a written opinion dated June 11, 2008, to the effect that, as of that date and based on and subject to various assumptions, matters considered and limitations described in UBS' opinion, the merger consideration to be paid in the aggregate by Invitrogen was fair, from a financial point of view, to Invitrogen.

The full text of UBS' opinion describes the assumptions made, procedures followed, matters considered and limitations on the review undertaken by UBS. This opinion is attached as Annex D to this joint proxy statement/prospectus and is incorporated into this joint proxy statement/prospectus by reference. **UBS' opinion was provided for the benefit of Invitrogen's board of directors in connection with, and for the purpose of, its evaluation of the merger consideration to be paid in the aggregate by Invitrogen from a financial point of view and does not address any other aspect of the merger. The opinion does not address the relative merits of the merger as compared to other business strategies or transactions that might be available to Invitrogen or Invitrogen's underlying business decision to effect the merger. The opinion does not constitute a recommendation to any stockholder as to how to vote or act with respect to the merger. Holders of Invitrogen common stock are encouraged to read UBS' opinion carefully in its entirety for a description of the assumptions made, procedures followed, matters considered and limitations on the review undertaken by UBS.** The summary of UBS' opinion described below is qualified in its entirety by reference to the full text of UBS' opinion.

In arriving at its opinion, UBS, among other things:

reviewed certain publicly available business and financial information relating to ABI and Invitrogen;

reviewed certain internal financial information and other data relating to ABI's business and financial prospects after giving effect to the Celera separation that were provided to UBS by the managements of ABI and Invitrogen and not publicly available, including financial forecasts and estimates prepared by Invitrogen's management that Invitrogen's board of directors directed UBS to utilize for purposes of its analysis;

reviewed certain internal financial information and other data relating to Invitrogen's business and financial prospects that were provided to UBS by Invitrogen's management and not publicly available, including financial forecasts and estimates prepared by Invitrogen's management that Invitrogen's board of directors directed UBS to utilize for purposes of its analysis;

reviewed certain estimates of synergies prepared by Invitrogen's management that were provided to UBS by Invitrogen and not publicly available that Invitrogen's board of directors directed UBS to utilize for purposes of its analysis;

discussed with Invitrogen's management its assessment of the potential tax liability to be incurred by ABI as a result of the Celera separation that Invitrogen's board of directors directed UBS to utilize for purposes of its analysis;

conducted discussions with members of the senior managements of Invitrogen and ABI concerning the businesses and financial prospects of Invitrogen and ABI after giving effect to the Celera separation;

reviewed publicly available financial and stock market data with respect to certain other companies UBS believed to be generally relevant;

Edgar Filing: INVITROGEN CORP - Form S-4/A

compared the financial terms of the merger with the publicly available financial terms of certain other transactions UBS believed to be generally relevant;

Table of Contents

reviewed current and historical market prices of Invitrogen common stock and Applied Biosystems stock;

considered certain pro forma effects of the merger on Invitrogen's financial statements;

reviewed the merger agreement dated as of June 11, 2008; and

conducted such other financial studies, analyses and investigations, and considered such other information, as UBS deemed necessary or appropriate.

In connection with UBS's review, with the consent of Invitrogen's board of directors, UBS assumed and relied upon, without independent verification, the accuracy and completeness in all material respects of the information provided to or reviewed by UBS for the purpose of its opinion. In addition, with the consent of Invitrogen's board of directors, UBS did not make any independent evaluation or appraisal of any of the assets or liabilities (contingent or otherwise) of Invitrogen or ABI, and was not furnished with any such evaluation or appraisal. With respect to the financial forecasts, estimates, synergies, pro forma effects and assessment referred to above, UBS assumed, at the direction of Invitrogen's board of directors, that such forecasts, estimates, synergies, pro forma effects and assessment had been reasonably prepared on a basis reflecting the best currently available estimates and judgments of Invitrogen's management as to the future financial performance of Invitrogen and ABI after giving effect to the Celera separation, such synergies and pro forma effects and the potential tax liability to be incurred by ABI as a result of the Celera separation. In addition, UBS assumed with the approval of Invitrogen's board of directors that the financial forecasts and estimates, including synergies, referred to above would be achieved at the times and in the amounts projected. UBS relied, at the direction of Invitrogen's board of directors, without independent verification, upon the assessment of Invitrogen's management of the potential tax liability to be incurred by ABI as a result of the Celera separation. UBS assumed, with the consent of Invitrogen's board of directors, that the merger would qualify for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended. UBS's opinion was necessarily based on economic, monetary, market and other conditions as in effect on, and the information available to UBS as of, the date of its opinion.

At the direction of Invitrogen's board of directors, UBS was not asked to, and it did not, offer any opinion as to the terms, other than the merger consideration to the extent expressly specified in its opinion, of the merger agreement or any related documents or the form of the merger. In addition, UBS expressed no opinion as to the fairness of the amount or nature of any compensation to be received by any officers, directors or employees of any parties to the merger, or any class of such persons, relative to the merger consideration. UBS expressed no opinion as to what the value of Invitrogen common stock would be when issued pursuant to the merger or the price at which Invitrogen common stock would trade at any time. In rendering its opinion, UBS assumed, with the consent of Invitrogen's board of directors, that (1) Invitrogen and ABI would comply with all material terms of the merger agreement and (2) the merger and related transactions, including, without limitation, the Celera separation, would be consummated in accordance with the terms of the merger agreement and related documents without any adverse waiver or amendment of any material term or condition of the merger agreement or related documents. UBS also assumed that all governmental, regulatory or other consents and approvals necessary for the consummation of the merger and related transactions would be obtained without any material adverse effect on Invitrogen, ABI or the merger. Except as described above, Invitrogen imposed no other instructions or limitations on UBS with respect to the investigations made or the procedures followed by UBS in rendering its opinion. The issuance of UBS's opinion was approved by an authorized committee of UBS.

Under the terms of UBS's engagement, Invitrogen has agreed to pay UBS for its financial advisory services in connection with the merger an aggregate fee of \$15 million, a portion of which was payable in connection with UBS's opinion and a significant portion of which is contingent upon consummation of the merger. In addition, Invitrogen has agreed to reimburse UBS for its reasonable expenses, including fees, disbursements and other charges of counsel, and to indemnify UBS and related parties against liabilities, including liabilities under federal securities laws, relating to, or arising out of, its engagement.

Table of Contents

UBS expects to participate in the financing for the merger and, in such event, would receive compensation in connection with such financing. In the past, UBS and its affiliates have provided services to Invitrogen unrelated to the proposed merger, for which UBS and its affiliates received compensation, including in the past having acted as a (1) financial advisor to Invitrogen in connection with a divestiture transaction and lead arranger for the financing of such transaction in 2007 and (2) joint lead arranger, joint book-running manager and syndication agent in connection with a credit facility of Invitrogen in 2006. As of the date of UBS' opinion, affiliates of UBS also were providing services to Invitrogen unrelated to the proposed merger, for which such affiliates received and, as of the date of UBS' opinion, continued to receive compensation, including providing asset management services and acting as a participant in Invitrogen's credit facility for which one of UBS' affiliates received and, as of the date of UBS' opinion, continued to receive fees and interest payments. In the ordinary course of business, UBS and its affiliates may hold or trade, for their own accounts and the accounts of their customers, securities of Invitrogen and ABI and, accordingly, may at any time hold a long or short position in such securities.

Invitrogen selected UBS as its financial advisor in connection with the merger because UBS is an internationally recognized investment banking firm with substantial experience in similar transactions and because of UBS' familiarity with Invitrogen and its business. UBS is regularly engaged in the valuation of businesses and their securities in connection with mergers and acquisitions, leveraged buyouts, negotiated underwritings, competitive bids, secondary distributions of listed and unlisted securities and private placements.

Summary of Joint Financial Presentation

In connection with rendering their respective opinions to Invitrogen's board of directors, Invitrogen's financial advisors jointly performed a variety of financial and comparative analyses which are summarized below. The following summary is not a complete description of all analyses performed and factors considered by UBS or Moelis in connection with their respective opinions. The preparation of a financial opinion is a complex process involving subjective judgments and is not necessarily susceptible to partial analysis or summary description. With respect to the selected companies analyses and the selected transactions analysis summarized below, no company or transaction used as a comparison was identical to Invitrogen, ABI or the merger. These analyses necessarily involve complex considerations and judgments concerning financial and operating characteristics and other factors that could affect the public trading or acquisition values of the companies concerned.

Invitrogen's financial advisors believe that the analyses and the summary below must be considered as a whole and that selecting portions of the analyses and factors or focusing on information presented in tabular format, without considering all analyses and factors or the narrative description of the analyses, could create a misleading or incomplete view of the processes underlying UBS' and Moelis' analyses and their respective opinions. Neither of Invitrogen's financial advisors drew, in isolation, conclusions from or with regard to any one factor or method of analysis for purposes of its opinion, but rather Invitrogen's financial advisors arrived at their respective opinions based on the results of all analyses undertaken by them and assessed as a whole.

The estimates of the future performance of Invitrogen and ABI provided by Invitrogen's management or derived from public sources in or underlying the analyses of Invitrogen's financial advisors are not necessarily indicative of future results or values, which may be significantly more or less favorable than those estimates. In performing their analyses, Invitrogen's financial advisors considered industry performance, general business and economic conditions and other matters, many of which were beyond the control of Invitrogen and ABI. Estimates of the financial value of companies do not purport to be appraisals or necessarily reflect the prices at which companies actually may be sold.

The merger consideration was determined through negotiation between Invitrogen and ABI and the decision by Invitrogen to enter into the merger was solely that of Invitrogen's board of directors. The opinions and financial analyses of Invitrogen's financial advisors were only one of many factors considered by Invitrogen's

Table of Contents

board of directors in its evaluation of the merger and should not be viewed as determinative of the views of Invitrogen's board of directors or management with respect to the merger or the merger consideration.

The following is a brief summary of the material financial analyses jointly performed by Invitrogen's financial advisors and reviewed with Invitrogen's board of directors on June 11, 2008 in connection with Invitrogen's financial advisors' respective opinions relating to the proposed merger. **The financial analyses summarized below include information presented in tabular format. In order to fully understand the financial analyses of Invitrogen's financial advisors, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. Considering the data below without considering the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of such financial analyses.** For purposes of ABI Post-Separation Financial Analyses summarized below, the term "implied per share merger consideration value" refers to the implied per share value of the merger consideration to be paid in the aggregate by Invitrogen, calculated as of June 11, 2008, of approximately \$36.80, consisting of \$17.10 in cash, the implied value of 0.4543 of a share of Invitrogen common stock of approximately \$19.69 based on the closing price of Invitrogen common stock on June 11, 2008, and the implied additional cash amount that would be payable in the merger of approximately \$0.01 based on the 20-day VWAP of Invitrogen common stock calculated, for illustrative purposes, assuming a closing date of June 11, 2008. In calculating implied enterprise values of ABI after giving effect to the Celera separation, referred to below as ABI Post-Separation, and implied enterprise values of the pro forma combined company, the estimated value, based on the assessment of Invitrogen's management, of the potential tax liability to be incurred by ABI as a result of the Celera separation was treated as debt. For purposes of the financial analyses summarized below, estimated cash earnings per share, referred to as cash EPS, of ABI Post-Separation and Invitrogen was calculated as earnings per share excluding transaction-related depreciation, amortization, deferred revenue write-downs and other one-time costs.

ABI Post-Separation Financial Analyses

ABI Post-Separation Selected Companies Analysis. Invitrogen's financial advisors reviewed selected financial and stock market data of the following seven publicly traded companies in the laboratory instrument industry:

Affymetrix, Inc.;

Bruker Corporation;

PerkinElmer, Inc.;

Tecan Group, Ltd.;

Thermo Fisher Scientific Inc.;

Varian, Inc.; and

Waters Corporation.

Invitrogen's financial advisors reviewed, among other things, the enterprise values of the selected companies, calculated as equity market value based on closing stock prices on June 11, 2008, plus debt at book value, preferred stock at liquidation value and minority interests at book value, less cash, cash equivalents and short-term investments, as multiples of calendar years 2008 and 2009 estimated revenue and estimated earnings before interest, taxes, depreciation and amortization, referred to as EBITDA. Closing stock prices of the selected companies on June 11, 2008 also were reviewed as a multiple of calendar years 2008 and 2009 estimated cash EPS. Multiples derived for the selected companies were then compared with corresponding multiples implied for ABI Post-Separation, based on, among other things, internal estimates of Invitrogen's management and both the closing price of Applied Biosystems stock on June 11, 2008 and the implied per share merger consideration value.

Edgar Filing: INVITROGEN CORP - Form S-4/A

Financial data for the selected companies were based on publicly available FirstCall consensus estimates, public filings and other

Table of Contents

publicly available information. This analysis indicated the following implied low, mean, median and high multiples for the selected companies, as compared to corresponding multiples implied for ABI Post-Separation:

| | Implied Multiples for Selected Companies | | | | Implied Multiples for ABI Post-Separation Based on: | |
|---|---|-------|--------|-------|--|--|
| | Low | Mean | Median | High | Closing Stock Price on 6/11/08: | Implied Per Share Merger Consideration Value: |
| <i>Enterprise Value as Multiple of Estimated Revenue:</i> | | | | | | |
| Calendar Year 2008 | 1.5x | 2.1x | 1.8x | 3.8x | 2.5x | 2.8x |
| Calendar Year 2009 | 1.4x | 2.0x | 1.7x | 3.5x | 2.3x | 2.7x |
| <i>Enterprise Value as Multiple of Estimated EBITDA:</i> | | | | | | |
| Calendar Year 2008 | 9.3x | 11.6x | 11.9x | 13.3x | 10.5x | 12.0x |
| Calendar Year 2009 | 7.8x | 10.1x | 10.6x | 12.0x | 10.1x | 11.6x |
| <i>Closing Stock Price as Multiple of Estimated Cash EPS:</i> | | | | | | |
| Calendar Year 2008 | 14.6x | 20.6x | 18.8x | 32.3x | 18.4x | 20.9x |
| Calendar Year 2009 | 12.8x | 16.2x | 16.0x | 19.8x | 16.8x | 19.1x |

ABI Post-Separation Selected Transactions Analysis. Invitrogen's financial advisors reviewed transaction values in the following six selected transactions announced since October 2003 involving companies in the laboratory instrument industry:

| Announcement Date | Acquiror | Target |
|-------------------|--------------------------------------|--------------------------------------|
| 7/25/2007 | Siemens AG | Dade Behring Holdings, Inc. |
| 5/8/2006 | Thermo Electron Corporation | Fisher Scientific International Inc. |
| 4/27/2006 | Siemens AG | Diagnostics Products Corporation |
| 4/25/2006 | Millipore Corporation | Serologicals Corporation |
| 3/17/2004 | Fisher Scientific International Inc. | Apogent Technologies Inc. |
| 10/10/2003 | General Electric Company | Amersham plc |

Invitrogen's financial advisors reviewed, among other things, transaction values in the selected transactions, calculated as the purchase price paid for the target company's equity, plus debt at book value, preferred stock at liquidation value and minority interests at book value, less cash, cash equivalents and short-term investments, as multiples of latest 12 months revenue and EBITDA and one-year forward and, to the extent publicly available, two-year forward estimated revenue and estimated EBITDA. Per share purchase prices in the selected transactions also were reviewed as a multiple of the target companies' one-year forward and, to the extent publicly available, two-year forward estimated cash EPS. Multiples derived for the selected transactions were then compared with corresponding multiples implied for ABI Post-Separation based on the implied per share merger consideration value. Financial data for the selected transactions were based on publicly available information at the time of announcement of the relevant transaction. Estimated financial data for ABI Post-Separation were based on internal estimates of Invitrogen's management. This analysis indicated the following implied low, mean, median and high multiples for the selected transactions, as compared to the corresponding multiples implied for ABI Post-Separation:

Table of Contents

| | Implied Multiples for Selected Transactions | | | | Implied Multiple for ABI Post-Separation |
|---|---|-------|--------|-------|---|
| | Low | Mean | Median | High | Based on Implied Per Share Merger Consideration Value |
| <i>Transaction Value as Multiple of:</i> | | | | | |
| Latest 12 Months Revenue | 2.3x | 3.6x | 3.5x | 4.9x | 2.9x |
| One-Year Forward Estimated Revenue | 2.0x | 3.2x | 3.2x | 4.0x | 2.8x |
| Two-Year Forward Estimated Revenue | 1.8x | 3.0x | 3.2x | 3.7x | 2.6x |
| <i>Transaction Value as Multiple of:</i> | | | | | |
| Latest 12 Months EBITDA | 11.3x | 15.2x | 15.5x | 20.3x | 11.9x |
| One-Year Forward Estimated EBITDA | 10.4x | 12.5x | 12.6x | 14.8x | 12.2x |
| Two-Year Forward Estimated EBITDA | 10.1x | 11.6x | 12.1x | 12.6x | 11.1x |
| <i>Per Share Purchase Price as Multiple of:</i> | | | | | |
| One-Year Forward Estimated Cash EPS | 16.1x | 24.5x | 22.3x | 39.1x | 20.4x |
| Two-Year Forward Estimated Cash EPS | 15.3x | 23.4x | 22.4x | 33.6x | 17.9x |

ABI Post-Separation Discounted Cash Flow Analysis. Invitrogen's financial advisors performed a discounted cash flow analysis of ABI Post-Separation using financial forecasts and estimates relating to ABI Post-Separation prepared by Invitrogen's management and estimates prepared by Invitrogen's management as to potential synergies anticipated by Invitrogen's management to result from the merger. Invitrogen's financial advisors calculated a range of implied present values (as of June 30, 2008), both before and after giving effect to potential synergies, of the standalone unlevered, after-tax free cash flows that ABI Post-Separation was forecasted to generate from July 1, 2008 until December 31, 2013 and of terminal values for ABI Post-Separation based on ABI Post-Separation's calendar year 2014 estimated EBITDA. Implied terminal values were derived by applying to ABI Post-Separation's calendar year 2014 estimated EBITDA a range of next 12 months estimated EBITDA terminal value multiples of 10.0x to 12.0x. Present values of cash flows and terminal values were calculated using discount rates ranging from 9.0% to 11.0%. The discounted cash flow analysis resulted in a range of implied present values of approximately \$34.00 to \$41.85 per outstanding share of Applied Biosystems stock before giving effect to potential synergies and approximately \$44.35 to \$56.10 per outstanding share of Applied Biosystems stock after giving effect to potential synergies, as compared to the implied per share merger consideration value of approximately \$36.80.

Invitrogen Financial Analyses

Invitrogen Selected Companies Analysis. Invitrogen's financial advisors reviewed selected financial and stock market data of the following six publicly traded companies in the laboratory consumables industry:

Bio-Rad Laboratories, Inc.;

Millipore Corporation;

QIAGEN N.V.;

Sigma-Aldrich Corporation;

Techne Corporation; and

Thermo Fisher Scientific Inc.

Edgar Filing: INVITROGEN CORP - Form S-4/A

Invitrogen's financial advisors reviewed, among other things, the enterprise values of the selected companies as multiples of calendar years 2008 and 2009 estimated revenue and estimated EBITDA. Closing stock prices of the selected companies on June 11, 2008 also were reviewed as a multiple of calendar years 2008 and 2009 estimated cash EPS. Multiples derived for the selected companies were then compared with corresponding multiples implied for Invitrogen based on, among other things, publicly available FirstCall

Table of Contents

consensus estimates and the closing price of Invitrogen common stock on June 11, 2008. Financial data for the selected companies were based on publicly available FirstCall consensus estimates, public filings and other publicly available information. This analysis indicated the following implied low, mean, median and high multiples for the selected companies, as compared to corresponding multiples implied for Invitrogen:

| | Implied Multiples for Selected Companies | | | | Implied Multiples for Invitrogen |
|---|---|-------|--------|-------|-------------------------------------|
| | Low | Mean | Median | High | |
| <i>Enterprise Value as Multiple of Estimated Revenue:</i> | | | | | |
| Calendar Year 2008 | 1.6x | 4.3x | 3.2x | 10.1x | 3.5x |
| Calendar Year 2009 | 1.5x | 3.9x | 3.0x | 9.2x | 3.3x |
| <i>Enterprise Value as Multiple of Estimated EBITDA:</i> | | | | | |
| Calendar Year 2008 | 9.3x | 12.9x | 12.6x | 17.1x | 12.0x |
| Calendar Year 2009 | 8.6x | 11.6x | 11.3x | 15.3x | 11.0x |
| <i>Closing Stock Price as Multiple of Estimated Cash EPS:</i> | | | | | |
| Calendar Year 2008 | 18.1x | 21.9x | 21.0x | 27.4x | 17.9x |
| Calendar Year 2009 | 15.6x | 18.8x | 18.1x | 24.2x | 16.7x |

Invitrogen Discounted Cash Flow Analysis. Invitrogen's financial advisors performed a discounted cash flow analysis of Invitrogen using financial forecasts and estimates relating to Invitrogen prepared by Invitrogen's management. Invitrogen's financial advisors calculated a range of implied present values (as of June 30, 2008) of the standalone unlevered, after-tax free cash flows that Invitrogen was forecasted to generate from July 1, 2008 until December 31, 2013 and of terminal values for Invitrogen based on Invitrogen's calendar year 2014 estimated EBITDA. Implied terminal values were derived by applying to Invitrogen's calendar year 2014 estimated EBITDA a range of next 12 months estimated EBITDA terminal value multiples of 10.5x to 12.5x. Present values of cash flows and terminal values were calculated using discount rates ranging from 9.0% to 11.0%. The discounted cash flow analysis resulted in a range of implied present values of approximately \$45.75 to \$56.30 per outstanding share of Invitrogen common stock, as compared to the closing price of Invitrogen common stock on June 11, 2008 of \$43.35.

Pro Forma Combined Company Discounted Cash Flow Analysis

Invitrogen's financial advisors performed a discounted cash flow analysis of Invitrogen and ABI Post-Separation on a combined basis using financial forecasts and estimates relating to Invitrogen and ABI Post-Separation prepared by Invitrogen's management, including estimates prepared by Invitrogen's management as to potential synergies anticipated by Invitrogen's management to result from the merger. Invitrogen's financial advisors calculated a range of implied present values (as of December 31, 2008), after giving effect to potential synergies, of the unlevered, after-tax free cash flows that Invitrogen and ABI Post-Separation were forecasted to generate on a combined basis from January 1, 2009 until December 31, 2013 and of terminal values for the combined company based on the calendar year 2014 estimated EBITDA of the combined company after giving effect to potential synergies. Implied terminal values were derived by applying to the calendar year 2014 estimated EBITDA of the combined company, after giving effect to potential synergies, a range of next 12 months estimated EBITDA terminal value multiples of 10.2x to 12.2x. Present values of cash flows and terminal values were calculated using discount rates ranging from 9.0% to 11.0%. The discounted cash flow analysis of the combined company resulted in a range of implied present values of approximately \$56.25 to \$72.00 per outstanding share of Invitrogen common stock, as compared to the range of implied present values of approximately \$45.75 to \$56.30 per outstanding share of Invitrogen common stock derived from the stand-alone discounted cash flow analysis of Invitrogen described above under *Invitrogen Financial Analyses* *Invitrogen Discounted Cash Flow Analysis*.

Table of Contents

Opinions of ABI's Financial Advisors

Opinion of Morgan Stanley

ABI retained Morgan Stanley to act as its financial advisor in connection with the merger because of its qualifications, expertise, reputation and knowledge of the business and affairs of ABI. On June 11, 2008, Morgan Stanley rendered its oral opinion, which opinion was subsequently confirmed in a written opinion dated June 11, 2008, to ABI's board of directors, to the effect that as of such date and based upon and subject to the assumptions, qualifications and limitations set forth in the written opinion, the consideration to be received by the holders of shares of Applied Biosystems stock pursuant to the merger agreement was fair from a financial point of view to such holders.

THE FULL TEXT OF MORGAN STANLEY'S WRITTEN FAIRNESS OPINION DATED JUNE 11, 2008, IS ATTACHED AS ANNEX E TO THIS JOINT PROXY STATEMENT/PROSPECTUS. YOU SHOULD READ THE OPINION IN ITS ENTIRETY FOR A DISCUSSION OF THE ASSUMPTIONS MADE, PROCEDURES FOLLOWED, FACTORS CONSIDERED AND LIMITATIONS UPON THE REVIEW UNDERTAKEN BY MORGAN STANLEY IN RENDERING ITS OPINION. THIS SUMMARY IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO THE FULL TEXT OF SUCH OPINION. MORGAN STANLEY'S OPINION IS DIRECTED TO ABI'S BOARD OF DIRECTORS, ADDRESSES ONLY THE FAIRNESS FROM A FINANCIAL POINT OF VIEW OF THE CONSIDERATION TO BE RECEIVED BY THE HOLDERS OF APPLIED BIOSYSTEMS STOCK, AND DOES NOT ADDRESS ANY OTHER ASPECT OF THE MERGER OR CONSTITUTE A RECOMMENDATION TO HOW ANY STOCKHOLDERS OF APPLIED BIOSYSTEMS OR INVITROGEN SHOULD VOTE AT ANY STOCKHOLDERS' MEETINGS HELD IN CONNECTION WITH THE MERGER.

In arriving at its opinion, Morgan Stanley, among other things:

reviewed certain publicly available financial statements and other business and financial information of ABI, the Applied Biosystems group and Invitrogen, respectively;

reviewed certain internal financial statements and other financial and operating data concerning ABI, the Applied Biosystems group and Invitrogen, respectively;

reviewed certain financial projections prepared by the managements of ABI, the Applied Biosystems group and Invitrogen, respectively;

reviewed information relating to certain strategic, financial and operational benefits anticipated from the merger, prepared by the managements of ABI, the Applied Biosystems group and Invitrogen, respectively;

discussed the past and current operations and financial condition and the prospects of ABI, including information relating to certain strategic, financial and operational benefits anticipated from the merger, with senior executives of ABI;

discussed the past and current operations and financial condition and the prospects of Invitrogen, including information relating to certain strategic, financial and operational benefits anticipated from the merger, with senior executives of Invitrogen;

reviewed the pro forma impact of the merger on Invitrogen's earnings per share, cash flow, consolidated capitalization and financial ratios;

reviewed the reported prices and trading activity for Applied Biosystems stock and Invitrogen common stock;

Edgar Filing: INVITROGEN CORP - Form S-4/A

compared the financial performance of ABI and Invitrogen and the prices and trading activity of Applied Biosystems stock and Invitrogen common stock with that of certain other publicly-traded companies comparable with ABI and Invitrogen, respectively, and their applicable securities;

Table of Contents

reviewed the financial terms, to the extent publicly available, of certain comparable acquisition transactions;

participated in certain discussions and negotiations among representatives of ABI, the Applied Biosystems group and Invitrogen and their financial and legal advisors;

reviewed the merger agreement, the commitment letter from certain lenders dated as of June 11, 2008 and certain related documents; and

performed such other analyses, reviewed such other information and considered such other factors as Morgan Stanley had deemed appropriate.

In arriving at its opinion, Morgan Stanley assumed and relied upon, without independent verification, the accuracy and completeness of the information that was publicly available or supplied or otherwise made available to Morgan Stanley by ABI and Invitrogen, and formed a substantial basis for its opinion. With respect to the financial projections, including information relating to certain strategic, financial and operational benefits anticipated from the merger, Morgan Stanley assumed that such projections had been reasonably prepared on bases reflecting the best currently available estimates and judgments of the respective managements of ABI, the Applied Biosystems group and Invitrogen of the future financial performance of ABI and Invitrogen. In addition, Morgan Stanley assumed that the merger will be consummated in accordance with the terms set forth in the merger agreement without any waiver, amendment or delay of any terms or conditions, including, among other things, that (1) the merger will be treated as a tax-free reorganization pursuant to the Internal Revenue Code of 1986, as amended, (2) Invitrogen will obtain financing in accordance with the terms set forth in the commitment letters and (3) the separation of the Celera Group would be completed prior to closing of the merger. Morgan Stanley assumed that in connection with the receipt of all the necessary governmental, regulatory or other approvals and consents required for the proposed merger, no delays, limitations, conditions or restrictions will be imposed that would have a material adverse effect on the contemplated benefits expected to be derived in the proposed merger. Morgan Stanley relied upon, without independent verification, the assessment by the managements of ABI and Invitrogen of: (1) the strategic, financial and other benefits expected to result from the merger; (2) the timing and risks associated with the integration of ABI and Invitrogen; (3) their ability to retain key employees of ABI and Invitrogen, respectively and (4) the validity of, and risks associated with, ABI's and Invitrogen's existing and future technologies, intellectual property, products, services and business models. Morgan Stanley is not a legal, tax or regulatory advisor. Morgan Stanley is a financial advisor only and relied upon, without independent verification, the assessment of ABI, the Applied Biosystems group and Invitrogen and with respect to legal, tax or regulatory matters, the legal, tax or regulatory advisors of ABI. Morgan Stanley expressed no opinion with respect to the fairness of the amount or nature of the compensation to any of ABI's officers, directors or employees, or any class of such persons, relative to the consideration to be received by the holders of shares of Applied Biosystems stock in the transaction. Morgan Stanley did not make any independent valuation or appraisal of the assets or liabilities of ABI, nor was Morgan Stanley furnished with any such appraisals. Morgan Stanley's opinion did not in any manner address the prices at which Invitrogen's common stock will trade following consummation of the merger. Morgan Stanley's opinion was necessarily based on financial, economic, market and other conditions as in effect on, and the information made available to Morgan Stanley as of the date of the opinion. Events occurring after June 11, 2008 may affect Morgan Stanley's opinion and the assumptions used in preparing it, and Morgan Stanley did not assume any obligation to update, revise or reaffirm this opinion. Morgan Stanley's opinion was approved by a committee of Morgan Stanley investment banking and other professionals in accordance with its customary practice.

The following is a summary of the material financial analyses used by Morgan Stanley in connection with providing its opinion to ABI's board of directors. The financial analyses summarized below include information presented in tabular format. In order to fully understand the financial analyses used by Morgan Stanley, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. Rather, the analyses listed in the tables and described below must be considered as a whole; considering any portion of such analyses and of the factors considered, without considering all analyses and factors, could create a misleading or incomplete view of the process underlying Morgan Stanley's fairness opinion.

Table of Contents*Historical Trading Analysis*

Morgan Stanley reviewed the price performance of the Applied Biosystems stock and the Invitrogen common stock from June 11, 2003 to June 11, 2008. Morgan Stanley compared an implied merger consideration for a share of Applied Biosystems stock of \$38.00 or \$37.85, calculated by multiplying the merger exchange ratio of 0.4543 by the closing price of Invitrogen common stock of \$43.69 as of June 10, 2008 or \$43.35 as of June 11, 2008, respectively, plus \$18.15 in cash, relative to the Applied Biosystems stock price over the period referenced above. For purposes of determining the implied merger consideration, Morgan Stanley assumed that the 20-day VWAP of Invitrogen common stock the arithmetic average of the volume-weighted average price of the Invitrogen common stock over the 20-trading day period ending three business days prior to the completion of the merger, which is the value for Invitrogen common stock used for determining the amount of any cash adjustment to the merger consideration under the merger agreement was equal to \$43.69, the closing price of the Invitrogen common stock on June 10, 2008, or \$43.35, the closing price of the Invitrogen common stock on June 11, 2008, as applicable. In this regard, Morgan Stanley noted that the 20-day VWAPs of Invitrogen common stock calculated for the periods ended three business days prior to June 10, 2008 and June 11, 2008 were different from 20-day VWAPs of Invitrogen common stock assumed by Morgan Stanley, and that the actual 20-day VWAP of Invitrogen common stock at the merger closing date will likely be different from either of these values, and therefore the amount of any cash adjustment to the merger consideration under the merger agreement will likely be different from the amount assumed by Morgan Stanley.

The tables below present: (1) the \$38.00 or \$37.85 implied merger consideration relative to the absolute share price of Applied Biosystems stock over the period referenced above and (2) the absolute share prices of Invitrogen common stock over the period reference above.

| | Applied Biosystems Stock Price |
|---|---|
| Implied Merger Consideration: | |
| Based on June 10, 2008 Invitrogen closing price | \$ 38.00 |
| Based on June 11, 2008 Invitrogen closing price | \$ 37.85 |
| Current | |
| On June 10, 2008 | \$ 32.74 |
| On June 11, 2008 | \$ 32.44 |
| 1-Month Average | \$ 34.01 |
| 3-Month Average | \$ 32.83 |
| 6-Month Average | \$ 32.82 |
| Last Twelve Month Average | \$ 32.90 |
| Last Twelve Month High (on October 31, 2007) | \$ 37.14 |
| Last Twelve Month Low (on June 12, 2007) | \$ 28.48 |
| 3-Year Average | \$ 30.32 |
| 5-Year Average | \$ 26.43 |
| 5-Year High (on November 8, 2006) | \$ 38.27 |
| 5-Year Low (on September 24, 2004) | \$ 18.05 |
| | Invitrogen Common Stock Price |
| Current | |
| On June 10, 2008 | \$ 43.69 |
| On June 11, 2008 | \$ 43.35 |
| 1-Month Average | \$ 45.68 |
| 3-Month Average | \$ 44.27 |
| 6-Month Average | \$ 44.45 |
| Last Twelve Month Average | \$ 42.57 |
| Last Twelve Month High (on December 7, 2007) | \$ 49.22 |
| Last Twelve Month Low (on August 1, 2007) | \$ 35.53 |
| 3-Year Average | \$ 36.70 |
| 5-Year Average | \$ 34.81 |
| 5-Year High (on December 7, 2007) | \$ 49.22 |
| 5-Year Low (on April 29, 2003) | \$ 18.45 |

Table of Contents

In addition, Morgan Stanley compared the trading performance of each of the Applied Biosystems stock and Invitrogen common stock to the trading performance of other comparable publicly traded corporations and the S&P 500 Index. The table below presents the percentage change from June 11, 2003 through June 11, 2008 for Applied Biosystems stock, Invitrogen, the S&P 500 Index, a group of comparable instrument companies and a group of comparable consumables companies.

| | Relative 5-Year Price Change |
|---------------------------------------|---|
| Applied Biosystems stock | 70% |
| Invitrogen | 118% |
| S&P 500 Index | 34% |
| Instrument Peer Group ⁽¹⁾ | 102% |
| Consumables Peer Group ⁽²⁾ | 94% |

- (1) Instrument peer group includes Beckman Coulter, Inc., Becton, Dickinson and Company, Bruker BioSciences Corporation, Cepheid, Dionex Corporation, Luminex Corporation, MDS, Inc., PerkinElmer, Inc., Thermo Fisher Scientific, Inc., Varian Medical Systems, Inc. and Waters Corporation.
- (2) Consumables peer group includes Affymetrix, Inc., Bio-RAD Laboratories, Inc., Charles River Laboratories Intl., Illumina, Inc., Millipore Corporation, Qiagen, Sigma-Aldrich Corporation and Techne Corporation.

Morgan Stanley noted that for the one year period from June 11, 2007 through June 11, 2008, the closing price of the Applied Biosystems stock ranged from approximately \$28.50 to \$37.25 and the closing price of the Invitrogen common stock ranged from approximately \$35.50 to \$49.25. The following table lists the implied percentage premium of an implied merger consideration for a share of Applied Biosystems stock of \$38.00 or \$37.85, calculated by multiplying the merger exchange ratio of 0.4543 by the closing price of Invitrogen common stock of \$43.69 as of June 10, 2008 or \$43.35 as of June 11, 2008, plus \$18.15 in cash, to the closing price of Applied Biosystems stock over various periods.

| Implied Merger Consideration | Unaffected Price Range⁽¹⁾ | Per Share Merger Consideration Premium as Compared to Applied Biosystems Stock Price | | | | |
|---|---|---|--------------------------|---------------------|---------------------|--------------------|
| | | Current (as of June 11, 2008) | 6 Months Avg. | LTM Avg. | LTM High | LTM Low |
| \$ 38.00 | 19-27% | 17% | 16% | 16% | 2% | 33% |
| \$ 37.85 | 18-26% | 17% | 15% | 15% | 2% | 33% |

- (1) The unaffected price range of \$30.00 to \$32.00 per share of Applied Biosystems stock represents the trading price range of Applied Biosystems stock prior to the public filing, on April 25, 2008, of a Schedule 13D by SAC Capital Advisors, LLC in relation to its and its affiliates' ownership of approximately 5.1% of the outstanding Applied Biosystems stock.

ABI's Comparable Company Trading Analysis

Morgan Stanley reviewed and compared, using publicly available information, certain current and historical financial information for ABI corresponding to current and historical financial information, ratios and public market multiples for other companies that share similar business characteristics with ABI. Morgan Stanley selected the companies used in its comparable companies trading analysis based on such factors as product offering, service offering and end markets served.

The comparable companies used in this analysis are as follows:

Instruments Comparable Companies:

Beckman Coulter, Inc.

Becton, Dickinson and Company

Table of Contents

Bruker BioSciences Corporation

Cepheid

Dionex Corporation

Luminex Corporation

MDS, Inc.

PerkinElmer, Inc.

Thermo Fisher Scientific, Inc.

Varian Medical Systems, Inc.

Waters Corporation

Consumables Comparable Companies:

Affymetrix, Inc.

Bio-RAD Laboratories, Inc.

Charles River Laboratories International, Inc.

Illumina, Inc.

Millipore Corporation

Qiagen

Sigma-Aldrich Corporation

Techne Corporation

Edgar Filing: INVITROGEN CORP - Form S-4/A

For purposes of this analysis, Morgan Stanley analyzed the following statistics of each of these companies for comparative purposes:

The ratio of aggregate value, defined as market capitalization plus total debt less cash and cash equivalents, to estimated earnings before interest, taxes, depreciation and amortization, which is referred to as EBITDA, for calendar years 2008 and 2009;

The ratio of price to estimated earnings per share for calendar years 2008 and 2009; and

The ratio of price to estimated calendar year 2009 earnings per share divided by the estimated long-term EPS growth rate.

Based on the analysis of the relevant metrics for each of the comparable companies, Morgan Stanley selected representative ranges of financial multiples of the comparable companies and applied these ranges of multiples to the relevant financial statistics of ABI based on equity research estimates. Based on the number of outstanding shares of Applied Biosystems stock and stock options to acquire Applied Biosystems stock, Morgan Stanley estimated the implied value per share of Applied Biosystems stock as of June 11, 2008 as follows:

| | Representative Multiple Range | | Implied Value per Share | |
|--|--|-------|------------------------------------|---------|
| Price to Estimated Calendar Year 2008 Earnings per Share | 18.0x | 20.0x | \$ 32.50 | \$36.25 |
| Price to Estimated Calendar Year 2009 Earnings per Share | 16.0x | 18.0x | \$ 32.75 | \$36.75 |
| Aggregate Value to Estimated Calendar Year 2008 EBITDA | 11.0x | 13.0x | \$ 34.00 | \$40.00 |
| Aggregate Value to Estimated Calendar Year 2009 EBITDA | 10.0x | 12.0x | \$ 32.75 | \$39.25 |
| Price to Estimated Calendar Year 2009 Earnings per Share divided by Estimated Long-Term EPS Growth | 1.1x | 1.3x | \$ 29.25 | \$34.50 |

Table of Contents

In connection with its analysis, Morgan Stanley noted that the consideration to be received by holders of Applied Biosystems stock pursuant to the merger agreement was \$38.00 per share or \$37.85 per share, calculated by multiplying the merger exchange ratio of 0.4543 by the closing price of Invitrogen common stock of \$43.69 as of June 10, 2008 or \$43.35 as of June 11, 2008, respectively, plus \$18.15 in cash. For purposes of determining the implied merger consideration, Morgan Stanley assumed that the 20-day VWAP of Invitrogen common stock the average volume-weighted average price of the Invitrogen common stock over the 20-trading day period ending three business days prior to the completion of the merger, which is the value for Invitrogen common stock used for determining the amount of any cash adjustment to the merger consideration under the merger agreement was equal to \$43.69, the closing price of the Invitrogen common stock on June 10, 2008, or \$43.35, the closing price of the Invitrogen common stock on June 11, 2008, as applicable. In this regard, Morgan Stanley noted that the 20-day VWAPs of Invitrogen common stock calculated for the periods ended three business days prior to June 10, 2008 and June 11, 2008 were different from 20-day VWAPs of Invitrogen common stock assumed by Morgan Stanley, and that the actual 20-day VWAP of Invitrogen common stock at the merger closing date will likely be different from either of these values, and therefore the amount of any cash adjustment to the merger consideration under the merger agreement will likely be different from the amount assumed by Morgan Stanley.

No company utilized in the comparable company analysis is identical to ABI. In evaluating the comparable companies, Morgan Stanley made judgments and assumptions with regard to general business, market and financial conditions and other matters, which are beyond the control of ABI, such as the impact of competition on the business of ABI or the industry generally, industry growth and the absence of any material adverse change in the financial condition of ABI or the industry or in the financial markets in general, which could affect the public trading value of the companies. Mathematical analysis (such as determining the average or median) is not in itself a meaningful method of using peer group data.

Invitrogen Comparable Company Trading Analysis

Morgan Stanley reviewed and compared, using publicly available information, certain current and historical financial information for Invitrogen corresponding to current and historical financial information, ratios and public market multiples for other companies that share similar business characteristics with Invitrogen. Morgan Stanley selected the companies used in its comparable companies trading analysis based on such factors as product offering, service offering and end markets served.

The comparable companies used in this analysis are as follows:

Consumables Comparable Companies:

Affymetrix, Inc.

Bio-RAD Laboratories, Inc.

Charles River Laboratories International, Inc.

Illumina, Inc.

Millipore Corporation

Qiagen

Sigma-Aldrich Corporation

Edgar Filing: INVITROGEN CORP - Form S-4/A

Techne Corporation

For purposes of this analysis, Morgan Stanley analyzed the following statistics of each of these companies for comparative purposes:

The ratio of aggregate value to EBITDA for calendar years 2008 and 2009;

Table of Contents

The ratio of price to estimated earnings per share for calendar years 2008 and 2009; and

The ratio of price to estimated calendar year 2009 earnings per share divided by the estimated long-term EPS growth rate. Based on the analysis of the relevant metrics for each of the comparable companies, Morgan Stanley selected representative ranges of financial multiples of the comparable companies and applied these ranges of multiples to the relevant Invitrogen financial statistics based on equity research estimates. Based on Invitrogen's current number of outstanding shares and stock options, Morgan Stanley estimated the implied value per Invitrogen common stock as of June 11, 2008 as follows:

| | Representative Multiple Range | | Implied Value per Share | |
|--|-------------------------------|-------|-------------------------|---------|
| Price to Estimated Calendar Year 2008 Earnings per Share | 18.0x | 20.0x | \$ 43.75 | \$48.50 |
| Price to Estimated Calendar Year 2009 Earnings per Share | 16.0x | 18.0x | \$ 41.75 | \$46.75 |
| Aggregate Value to Estimated Calendar Year 2008 EBITDA | 11.0x | 13.0x | \$ 38.25 | \$46.25 |
| Aggregate Value to Estimated Calendar Year 2009 EBITDA | 10.0x | 12.0x | \$ 38.50 | \$47.50 |
| Price to Estimated Calendar Year 2009 Earnings per Share divided by Estimated Long-Term EPS Growth | 1.1x | 1.3x | \$ 37.25 | \$44.00 |

In connection with its analysis, Morgan Stanley noted that the price per share of Invitrogen was \$43.69 as of June 10, 2008 and \$43.35 as of June 11, 2008.

No company utilized in the comparable company analysis is identical to Invitrogen. In evaluating the comparable companies, Morgan Stanley made judgments and assumptions with regard to general business, market and financial conditions and other matters, which are beyond the control of Invitrogen, such as the impact of competition on the business of Invitrogen or the industry generally, industry growth and the absence of any material adverse change in the financial condition of Invitrogen or the industry or in the financial markets in general, which could affect the public trading value of the companies. Mathematical analysis (such as determining the average or median) is not in itself a meaningful method of using peer group data.

Equity Research Price Target Analysis

Morgan Stanley reviewed and analyzed the price targets for the Applied Biosystems stock prepared and published by equity research analysts during the period from April 23, 2008 through June 5, 2008. These targets reflect each analyst's estimate of the future public market-trading price of Applied Biosystems stock and are not discounted to reflect present values. The range of undiscounted price targets for the Applied Biosystems stock was \$34.50 to \$40.00. The range of price targets for Applied Biosystems stock, discounted to present value using a discount rate of 10.0%, was \$31.25 to \$36.25.

In connection with its analysis, Morgan Stanley noted that the consideration to be received by holders of Applied Biosystems stock pursuant to the merger agreement was \$38.00 per share or \$37.85 per share, calculated by multiplying the merger exchange ratio of 0.4543 by the closing price of Invitrogen common stock of \$43.69 as of June 10, 2008 or \$43.35 as of June 11, 2008, respectively, plus \$18.15 in cash. For purposes of determining the implied merger consideration, Morgan Stanley assumed that the 20-day VWAP of Invitrogen common stock—the average volume-weighted average price of the Invitrogen common stock over the 20-trading day period ending three business days prior to the completion of the merger, which is the value for Invitrogen common stock used for determining the amount of any cash adjustment to the merger consideration under the merger agreement—was equal to \$43.69, the closing price of the Invitrogen common stock on June 10, 2008, or \$43.35, the closing price of the Invitrogen common stock on June 11, 2008, as applicable. In this regard, Morgan Stanley noted that the 20-day VWAPs of Invitrogen common stock calculated for the periods ended three business days prior to June 10, 2008 and June 11, 2008 were different from 20-day VWAPs of Invitrogen common stock assumed by Morgan Stanley, and that the actual 20-day VWAP of Invitrogen common stock at

Table of Contents

the merger closing date will likely be different from either of these values, and therefore the amount of any cash adjustment to the merger consideration under the merger agreement will likely be different from the amount assumed by Morgan Stanley.

Morgan Stanley also reviewed and analyzed the price targets for the Invitrogen common stock prepared and published by equity research analysts during the period from April 22, 2008 through June 4, 2008. These targets reflect each analyst's estimate of the future public market-trading price of Invitrogen common stock and are not discounted to reflect present values. The range of undiscounted price targets for the Invitrogen common stock was \$49.00 to \$54.00. The range of price targets for Invitrogen common stock, discounted to present value using a discount rate of 10.0%, was \$44.50 to \$49.00.

In connection with its analysis, Morgan Stanley noted that the price per share of Invitrogen was \$43.69 as of June 10, 2008 and \$43.35 as of June 11, 2008.

The public market trading price targets published by the equity research analysts do not necessarily reflect current market trading prices for Invitrogen common stock and these estimates are subject to uncertainties, including the future financial performance of Invitrogen and future financial market conditions.

Precedent Transactions Analysis

Morgan Stanley reviewed and analyzed publicly-available statistics for selected life science tools sector transactions since January 1, 2003 with transaction values of greater than \$1 billion. The following list sets forth the acquisition transactions that were reviewed in connection with this analysis:

Selected Precedent Transactions (Target/Acquiror)

Inveresk Research Group, Inc./Charles River Laboratories International, Inc.

Serologicals Corporation/Millipore Corporation

Amersham PLC/General Electric Co

Fisher Scientific International Inc./Thermo Electron Corporation.

Apogent Technologies Inc./Fisher Scientific International Inc.

Gambro AB/Indap AB

For each transaction noted above, Morgan Stanley noted the aggregate value to last-twelve-month EBITDA. The following table summarizes Morgan Stanley's analysis:

| <i>Precedent Transaction Financial Statistic</i> | Representative Multiple Range | | Implied Value per Share | |
|---|--------------------------------------|-------|--------------------------------|---------|
| Aggregate Value to Estimated Last-Twelve-Month (as of June 30, 2008) EBITDA | 12.0x | 15.0x | \$ 35.25 | \$43.50 |

In connection with its analysis, Morgan Stanley noted that the consideration to be received by holders of Applied Biosystems stock pursuant to the merger agreement was \$38.00 per share or \$37.85 per share, calculated by multiplying the merger exchange ratio of 0.4543 by the closing price of Invitrogen common stock of \$43.69 as of June 10, 2008 or \$43.35 as of June 11, 2008, respectively, plus \$18.15 in cash. For purposes of

Edgar Filing: INVITROGEN CORP - Form S-4/A

determining the implied merger consideration, Morgan Stanley assumed that the 20-day VWAP of Invitrogen common stock (the average volume-weighted average price of the Invitrogen common stock over the 20-trading day period ending three business days prior to the completion of the merger, which is the value for Invitrogen common stock used for determining the amount of any cash adjustment to the merger consideration under the merger agreement) was equal to \$43.69, the closing price of the Invitrogen common stock on June 10, 2008, or

Table of Contents

\$43.35, the closing price of the Invitrogen common stock on June 11, 2008, as applicable. In this regard, Morgan Stanley noted that the 20-day VWAPs of Invitrogen common stock calculated for the periods ended three business days prior to June 10, 2008 and June 11, 2008 were different from 20-day VWAPs of Invitrogen common stock assumed by Morgan Stanley, and that the actual 20-day VWAP of Invitrogen common stock at the merger closing date will likely be different from either of these values, and therefore the amount of any cash adjustment to the merger consideration under the merger agreement will likely be different from the amount assumed by Morgan Stanley.

No company or transaction utilized in the precedent transaction analysis is identical to ABI, Invitrogen or the merger. In evaluating the precedent transactions, Morgan Stanley made judgments and assumptions with regard to general business, market and financial conditions and other matters, which are beyond the control of ABI and Invitrogen, such as the impact of competition on the business of ABI, Invitrogen or the industry generally, industry growth and the absence of any material adverse change in the financial condition of ABI, Invitrogen or the industry or in the financial markets in general, which could affect the public trading value of the companies and the aggregate value of the transactions to which they are being compared.

Premiums Paid Analysis

Morgan Stanley compared the premia paid in U.S. public company transactions, excluding terminated transactions, ESOPs, self-tenders, spin-offs, minority interest transactions, exchange offers, recapitalizations, and restructurings, that were announced between January 1, 2006 and April 14, 2008 with transaction values of between \$5 billion and \$10 billion. Morgan Stanley also compared the premia paid in such transactions where over 50% of the consideration was paid in the form of acquiror stock.

Morgan Stanley selected representative ranges of implied premia and applied these ranges of premia to a price range of \$30.00 to \$32.00 per share of Applied Biosystems stock which represented the unaffected trading price range of Applied Biosystems stock prior to the public filing, on April 25, 2008, of a Schedule 13D by SAC Capital Advisors, LLC in relation to its and its affiliates' ownership of approximately 5.1% of the outstanding Applied Biosystems stock. The following summarizes Morgan Stanley's analysis:

| | Representative Multiple Range | | Implied Value per Share | |
|--|-------------------------------|-------|-------------------------|---------|
| <i>Precedent Transaction Financial Statistic</i> | | | | |
| Premium to 1-Day Prior Closing Share Price for all Deals that Meet Criteria Described Above | 20.0% | 30.0% | \$36.00 | \$41.50 |
| Premium to 1-Day Prior Closing Share Price for all Deals that Meet Criteria Described Above and Had over 50% Stock Consideration | 15.0% | 25.0% | \$34.50 | \$40.00 |

In connection with its analysis, Morgan Stanley noted that the consideration to be received by holders of Applied Biosystems stock pursuant to the merger agreement was \$38.00 per share or \$37.85 per share, calculated by multiplying the merger exchange ratio of 0.4543 by the closing price of Invitrogen common stock of \$43.69 as of June 10, 2008 or \$43.35 as of June 11, 2008, respectively, plus \$18.15 in cash. For purposes of determining the implied merger consideration, Morgan Stanley assumed that the 20-day VWAP of Invitrogen common stock—the average volume-weighted average price of the Invitrogen common stock over the 20-trading day period ending three business days prior to the completion of the merger, which is the value for Invitrogen common stock used for determining the amount of any cash adjustment to the merger consideration under the merger agreement—was equal to \$43.69, the closing price of the Invitrogen common stock on June 10, 2008, or \$43.35, the closing price of the Invitrogen common stock on June 11, 2008, as applicable. In this regard, Morgan Stanley noted that the 20-day VWAPs of Invitrogen common stock calculated for the periods ended three business days prior to June 10, 2008 and June 11, 2008 were different from 20-day VWAPs of Invitrogen common stock assumed by Morgan Stanley, and that the actual 20-day VWAP of Invitrogen common stock at

Table of Contents

the merger closing date will likely be different from either of these values, and therefore the amount of any cash adjustment to the merger consideration under the merger agreement will likely be different from the amount assumed by Morgan Stanley.

No company or transaction utilized in the premiums paid analysis is identical to ABI, Invitrogen or the merger. In evaluating the precedent transactions, Morgan Stanley made judgments and assumptions with regard to general business, market and financial conditions and other matters, which are beyond the control of ABI and Invitrogen, such as the impact of competition on the business of ABI, Invitrogen or the industry generally, industry growth and the absence of any material adverse change in the financial condition of ABI, Invitrogen or the industry or in the financial markets in general, which could affect the public trading value of the companies and the aggregate value of the transactions to which they are being compared.

Applied Biosystems Group Discounted Cash Flow Analysis

Morgan Stanley calculated a range of equity value per share for Applied Biosystems based on a discounted cash flow analysis as of June 30, 2008. Morgan Stanley relied on the Management Projections and extrapolations from such projections for fiscal years 2011 to 2014. Morgan Stanley calculated the net present value of the unlevered free cash flows of ABI for the fiscal years 2009 through 2013 and calculated terminal values as at the end of fiscal year 2013 based on the estimated next-twelve-month EBITDA and a multiple range of 10.0x to 12.0x. These values were discounted to present values at a range of discount rate of 8.0% to 10.0%, then combined to result in a range of implied value per share of \$35.75 to \$43.50.

In connection with its analysis, Morgan Stanley noted that the consideration to be received by holders of Applied Biosystems stock pursuant to the merger agreement was \$38.00 per share or \$37.85 per share, calculated by multiplying the merger exchange ratio of 0.4543 by the closing price of Invitrogen common stock of \$43.69 as of June 10, 2008 or \$43.35 as of June 11, 2008, respectively, plus \$18.15 in cash.

Pro Forma Analysis

Morgan Stanley analyzed the pro forma impact of the merger on Invitrogen's pro forma earnings per share excluding the estimated impact of the amortization of identifiable intangibles relating to the merger. Morgan Stanley assumed the consideration to be received by holders of Applied Biosystems stock pursuant to the merger was 0.4543 shares of Invitrogen common stock plus \$18.15 in cash per share of Applied Biosystems stock. Based on this analysis, Morgan Stanley observed that the merger would result in earnings per share dilution for Invitrogen stockholders in 2009 of 2.9%. The analysis included one-time charges and excluded synergies. Including synergies, in 2009, the merger would result in earnings per share accretion for Invitrogen stockholders of 7.0%.

For 2010, Morgan Stanley observed that merger would result in earnings per share dilution for Invitrogen stockholders of 2.0%, before taking into account any synergies. Including synergies, in 2010, the merger would result in earnings per share accretion for Invitrogen shareholders of 17.5%.

Miscellaneous

In connection with the review of the merger by ABI's board of directors, Morgan Stanley performed a variety of financial and comparative analyses for purposes of rendering its opinion. The preparation of a financial opinion is a complex process and is not necessarily susceptible to a partial analysis or summary description. In arriving at its opinion, Morgan Stanley considered the results of all of its analyses as a whole and did not attribute any particular weight to any analysis or factor it considered. Morgan Stanley believes that selecting any portion of its analyses, without considering all analyses as a whole, would create an incomplete view of the process underlying its analyses and opinion. In addition, Morgan Stanley may have given various analyses and factors more or less weight than other analyses and factors, and may have deemed various assumptions more or

Table of Contents

less probable than other assumptions. As a result, the ranges of valuations resulting from any particular analysis described above should not be taken to be Morgan Stanley's view of the actual value of ABI. In performing its analyses, Morgan Stanley made numerous assumptions with respect to industry performance, general business and economic conditions and other matters. Many of these assumptions are beyond the control of ABI. Any estimates contained in Morgan Stanley's analyses are not necessarily indicative of future results or actual values, which may be significantly more or less favorable than those suggested by such estimates.

Morgan Stanley conducted the analyses described above solely as part of its analysis of the fairness of the consideration to be received by holders of shares of Applied Biosystems stock pursuant to the merger agreement from a financial point of view to such holders and in connection with the delivery of its opinion to ABI's board of directors. These analyses do not purport to be appraisals or to reflect the prices at which shares of Applied Biosystems stock might actually trade.

The consideration to be paid pursuant to the merger agreement was determined through arm's-length negotiations between ABI and Invitrogen and was approved by each company's board of directors. Morgan Stanley provided advice to ABI during these negotiations. Morgan Stanley did not, however, recommend any specific merger consideration to ABI or that any specific consideration constituted the only appropriate consideration for the merger.

Morgan Stanley's opinion and its presentation to ABI's board of directors was one of many factors taken into consideration by ABI's board of directors in deciding to approve, adopt and authorize the merger agreement. Consequently, the analyses as described above should not be viewed as determinative of the opinion of ABI's board of directors with respect to the consideration to be received by the holders of shares of Applied Biosystems stock pursuant to the merger agreement or of whether ABI's board of directors would have been willing to agree to a different merger consideration.

Morgan Stanley is a global financial services firm engaged in the securities, investment management and individual wealth management businesses. Morgan Stanley's securities business is engaged in securities underwriting, trading and brokerage activities, foreign exchange, commodities and derivatives trading, prime brokerage, as well as providing investment banking, financing and financial advisory services. Morgan Stanley, its affiliates, directors and officers may at any time invest on a principal basis or manage funds that invest, hold long or short positions, finance positions, and may trade or otherwise structure and effect transactions, for their own account or the accounts of its customers, in debt or equity securities or loans of ABI, Invitrogen or any other company, or any currency or commodity, that may be involved in the merger, or any related derivative instrument. In the two years prior to the date hereof, Morgan Stanley has provided financial advisory and financing services for ABI and has received fees in connection with such services. Morgan Stanley may also seek to provide such services to ABI or Invitrogen in the future and expects to receive fees for the rendering of these services.

As compensation for its services in connection with the Merger, ABI has agreed to pay Morgan Stanley a fee of approximately \$29 million, a substantial portion of which is contingent upon the closing of the merger. Morgan Stanley has agreed to credit ABI's account in the amount of \$1.5 million, which represents Greenhill's fees for its services in connection with the Merger. ABI has also agreed to reimburse Morgan Stanley for certain expenses incurred by Morgan Stanley, including fees of outside legal counsel, and to indemnify Morgan Stanley and related parties against certain liabilities and expenses arising out of Morgan Stanley's engagement. In addition, Morgan Stanley or one of its affiliates is providing financing services to Invitrogen in connection with the merger and will receive fees for the rendering of these services.

Opinion of Greenhill

ABI retained Greenhill to render an opinion as to the fairness of the consideration to be received by the holders of shares of Applied Biosystems stock in the merger because Morgan Stanley, or one of its affiliates, was

Table of Contents

considering a role in the financing of the proposed transaction. On June 11, 2008, Greenhill delivered to ABI's board of directors its oral opinion, which was subsequently confirmed by the delivery of a written opinion of the same date, to the effect that as of June 11, 2008, and based upon and subject to the various assumptions made, procedures followed, matters considered and limitations described in such opinion, the merger consideration to be received by the holders of shares of Applied Biosystems stock (other than Invitrogen, Atom Acquisition, and their respective affiliates), as provided for in the merger agreement, was fair, from a financial point of view, to such holders.

The full text of the written opinion of Greenhill, dated June 11, 2008, is attached to this joint proxy statement/prospectus as Annex F and is incorporated herein by reference. **The summary of Greenhill's opinion that follows is qualified in its entirety by reference to the full text of the opinion. Holders of Applied Biosystems stock are urged to read the opinion carefully in its entirety.**

In arriving at its opinion, Greenhill, among other things:

reviewed the draft of the merger agreement dated June 6, 2008 and certain related documents;

reviewed certain publicly available financial statements of ABI, the Applied Biosystems group and Invitrogen;

reviewed certain other publicly available business and financial information relating to ABI, the Applied Biosystems group and Invitrogen that Greenhill deemed relevant;

reviewed certain information, including financial forecasts and other financial and operating data, concerning the Applied Biosystems group and Invitrogen prepared by or discussed with the management of ABI, the Applied Biosystems group and Invitrogen or their respective advisors, and which ABI provided to Greenhill to utilize for purposes of Greenhill's analyses;

discussed the past and present operations and financial condition and the prospects of the Applied Biosystems group and Invitrogen with senior executives of ABI, the Applied Biosystems group and Invitrogen;

reviewed certain information regarding the amount and timing of potential cost efficiencies expected to result from the merger, referred to herein as synergies, prepared by management of ABI, the Applied Biosystems group and Invitrogen;

reviewed the historical market prices and trading activity for the Applied Biosystems stock and Invitrogen common stock and analyzed their implied valuation multiples;

compared the value of the merger consideration and related premiums and multiples with those received in certain publicly available transactions that Greenhill deemed relevant;

compared the value of the merger consideration with the trading valuations of certain publicly traded companies that Greenhill deemed relevant;

compared the value of the merger consideration with the valuation derived by discounting future cash flows and a terminal value of the Applied Biosystems group at discount rates Greenhill deemed appropriate; and

Edgar Filing: INVITROGEN CORP - Form S-4/A

performed such other analyses and considered such other factors as Greenhill deemed appropriate.

The most recent draft of the merger agreement Greenhill reviewed prior to rendering its opinion was the draft dated June 6, 2008. Prior to Greenhill rendering its opinion, ABI advised Greenhill of the cash adjustment mechanism that was to be included in the final, executed merger agreement, pursuant to which holders of shares of Applied Biosystems stock that are converted, in whole or in part, into the right to receive shares of Invitrogen common stock, would also receive an amount in cash, without interest, in the event that the 20-day VWAP of Invitrogen common stock over the 20-trading day period ending three business days prior to the completion of the merger was less than \$46.00 per share.

Table of Contents

Greenhill's opinion was addressed to and provided for the information of ABI's board of directors in connection with the board of directors consideration of the merger. Greenhill's opinion was directed only to the fairness of the merger consideration from a financial point of view and does not address any other aspect of the merger. The opinion does not address the amount or nature of any compensation to be received by any officers, directors or employees of any parties to the merger, or any class of such persons relative to the merger consideration. The opinion does not address the value of Invitrogen common stock at the time it will be issued pursuant to the merger or the price at which Invitrogen common stock will trade at any time. Further, the opinion was not intended to be and does not constitute a recommendation to the members of ABI's board of directors as to whether they should approve the merger agreement, nor does it constitute a recommendation to any stockholder as to how such stockholder should vote, act or elect with respect to the merger, the merger consideration or any matter relating thereto.

In giving its opinion, Greenhill assumed and relied upon, with the consent of ABI's board of directors and without independent verification, the accuracy and completeness of the information publicly available, supplied or otherwise made available to Greenhill by representatives and management of ABI, the Applied Biosystems group and Invitrogen and further relied upon the assurances of the representatives and management of ABI, the Applied Biosystems group and Invitrogen, as applicable, that they were not aware of any facts (or omissions of facts) or circumstances that would make such information inaccurate or misleading. With respect to the synergies, financial forecasts and other financial and operating data concerning ABI, the Applied Biosystems group and Invitrogen that have been supplied or otherwise made available to or discussed with Greenhill and that ABI provided to Greenhill to utilize for purposes of its analyses, Greenhill assumed that such synergies, forecasts and data were reasonably prepared on a basis reflecting the best currently available estimates and good faith judgments of the management of ABI, the Applied Biosystems group and Invitrogen, as applicable, as to such matters, and relied upon such synergies, forecasts and data in arriving at its opinion. Greenhill did not express an opinion with respect to such synergies, forecasts or data or the assumptions upon which they are based. Greenhill did not make any independent valuation or appraisal of the assets or liabilities of ABI, nor was it furnished with any such appraisals. Greenhill assumed, with the consent of ABI's board of directors, that the merger will be treated as a tax-free reorganization for federal income tax purposes. Greenhill assumed that the merger will be consummated in accordance with the terms set forth in the final, executed merger agreement, which Greenhill further assumed will be identical in all material respects to the draft dated June 6, 2008 (the latest draft thereof that Greenhill reviewed), with the exception of the addition of the cash adjustment mechanism described above, in the final, executed merger agreement, without any waiver or modification of any material terms or conditions set forth in the merger agreement. Greenhill further assumed that the planned redemption all of the issued and outstanding shares of Celera Group common stock in exchange for shares of Celera Corporation common stock would be consummated in accordance with its terms, without any waiver or modification of any material term or condition related thereto. Greenhill further assumed that all governmental and third party consents, approvals and agreements necessary for the consummation of the merger will be obtained without any adverse effect on ABI, Invitrogen or the merger.

Greenhill's opinion is necessarily based on financial, economic, market and other conditions as in effect on, and the information made available to Greenhill as of, the date of its opinion. It should be understood that subsequent developments may affect Greenhill's opinion, and Greenhill does not have any obligation to update, revise, or reaffirm its opinion.

Summary of Financial Analyses

The following is a summary of the material financial analyses provided by Greenhill to ABI's board of directors in connection with rendering its opinion described above. The summary does not purport to be a complete description of all analyses performed or factors considered by Greenhill in connection with its opinion, nor does the order in which the analyses are described represent relative importance or weight given to those analyses by Greenhill. The preparation of a financial opinion is a complex process involving subjective judgments and is not necessarily susceptible to partial analysis or summary description. With respect to the

Table of Contents

analyses below, no company, business division or transaction used as a comparison was either identical or directly comparable to ABI, the Applied Biosystems group or the merger. These analyses necessarily involve complex considerations and judgments concerning financial and operating characteristics and other factors that could affect the public trading or acquisition values of the companies concerned.

The summary below must be considered as a whole. Selecting portions of the analyses and factors or focusing on information presented in tabular format, without considering all analyses and factors or the narrative description of the analyses, could create a misleading or incomplete view of the processes underlying Greenhill's analyses and opinion. Greenhill did not draw, in isolation, conclusions from or with regard to any one factor or method of analysis for purposes of its opinion, but rather Greenhill arrived at its ultimate opinion based on the results of all analyses undertaken and assessed as a whole.

The estimates of the future performance of ABI provided by ABI's or the Applied Biosystems group's management or analyst consensus estimates in or underlying Greenhill's analyses are not necessarily indicative of future results or values, which may be significantly more or less favorable than those estimates. In performing its analyses, Greenhill considered industry performance, general business and economic conditions and other matters, many of which are beyond the control of ABI. Estimates of the financial value of companies do not purport to be appraisals or reflect the prices at which companies actually may be sold.

The merger consideration was determined through negotiation between ABI and Invitrogen and the decision to enter into the merger was solely that of ABI's board of directors. Greenhill was not involved in the negotiation of the merger consideration. Greenhill's opinion and financial analyses were only one of many factors considered by ABI's board of directors in its evaluation of the merger and should not be viewed as determinative of the views of ABI's board of directors or management with respect to the merger or the merger consideration.

For purposes of the financial analyses summarized below, the per share merger consideration refers to the per share value of the merger consideration of \$37.85 per share of Applied Biosystems stock, based on the implied value to be received by a holder of Applied Biosystems stock electing to receive part stock consideration and part cash consideration, assuming that the average volume weighted average price per share of Invitrogen common stock during the 20 consecutive trading days immediately preceding the three business days prior to the closing of the merger equals the closing price of Invitrogen common stock of \$43.35 per share on June 11, 2008. The average volume weighted average price per share of Invitrogen common stock during the 20 consecutive trading days immediately preceding the three business days prior to the closing of the merger may be different from the amount assumed by Greenhill for purposes of its analyses, and Greenhill's opinion does not address the value of Invitrogen common stock at the time it will be issued pursuant to the merger or the price at which Invitrogen common stock will trade at any time.

Selected Comparable Company Analysis

Greenhill performed a selected comparable company analysis of ABI, an analysis which is based on factors including the then current market values, capital structure and operating statistics of other publicly traded companies believed to be generally relevant, in order to derive trading multiples for these companies which then could be applied to ABI in order to derive an implied per share equity value range for ABI.

In this analysis, Greenhill reviewed, to the extent publicly available, selected financial and stock market data for the following publicly traded companies:

Beckman Coulter, Inc.

Bruker Corporation

Illumina, Inc.

Invitrogen Corporation

Table of Contents

Mettler-Toledo International Inc.

Millipore Corporation

PerkinElmer, Inc.

Qiagen NV

Sigma-Aldrich Corporation

Thermo Fisher Scientific Inc.

Varian, Inc.

Waters Corporation

Greenhill selected these companies because, among other reasons, they are publicly traded companies with operations or businesses that for purposes of analysis may be considered reasonably comparable to those of ABI. None of the selected companies is directly comparable to ABI. Financial data of the selected companies were based on publicly available data, including Capital IQ, Inc., FactSet Research Systems, Inc., the Institutional Brokers Estimate System, public filings and other publicly available information, based on closing prices as of June 11, 2008. Financial data of ABI were based on financial forecasts and other financial and operating data concerning ABI prepared by or discussed with the management of ABI, the Applied Biosystems group or their respective advisors, and which ABI provided to Greenhill to utilize for purposes of its analyses, referred to herein as ABI management estimates.

For purposes of this analysis, Greenhill analyzed the following information for the selected companies, as well as for ABI:

enterprise value, calculated as the sum of the fully diluted market value of the respective company's common stock, the book value of its outstanding debt, the book value of its preferred stock and the book value of any minority interest, minus total cash and cash equivalents, as a multiple of estimated earnings before interest, taxes, depreciation and amortization, referred to herein as EBITDA, for estimated calendar years 2008 and 2009; and

per share equity value of its common stock as a multiple of estimated earnings per share, referred to herein as EPS, for estimated calendar years 2008 and 2009.

Based on these analyses and applying its professional judgment, Greenhill selected a range of enterprise value multiples of estimated EBITDA between 11.0x and 12.0x for calendar year 2008 and between 10.5x and 11.5x for calendar year 2009 and per share equity value multiples of estimated EPS between 18.5x and 20.0x for calendar year 2008 and between 16.5x and 17.5x for calendar year 2009. For purposes of calculating ABI's implied enterprise and per share equity value ranges for this analysis, Greenhill assumed a net cash position of \$239.7 million and a fully diluted share count of 175.1 million shares of Applied Biosystems stock based on the treasury stock method. When applied to ABI, such multiples yielded an implied per share equity value range of \$33.26 to \$36.79. Greenhill compared this range to the per share merger consideration of \$37.85 to be received by holders of Applied Biosystems stock in the merger.

Discounted Cash Flow Analysis

Edgar Filing: INVITROGEN CORP - Form S-4/A

Using discounted cash flow methodology, Greenhill reviewed the projected unlevered future cash flows for ABI, using ABI's management estimates, as described above, in order to derive an implied per share equity value range for ABI. Greenhill also calculated estimated unlevered terminal values for ABI by applying a range of terminal EBITDA multiples ranging from 10.0x to 12.0x to fiscal year 2014 estimated EBITDA. The cash flows and terminal values were then discounted to present value utilizing discount rates, based on a weighted average cost of capital, from 8.0% to 9.0%. For purposes of calculating ABI's implied enterprise and per share equity value ranges for this analysis, Greenhill assumed a net cash position of \$239.7 million and a fully diluted share count of 175.1 million shares of Applied Biosystems stock based on the treasury stock method.

Table of Contents

This methodology resulted in an implied per share equity value range of \$35.99 to \$42.63 for the Applied Biosystems group. Greenhill compared this range to the per share merger consideration of \$37.85 to be received by holders of Applied Biosystems stock in the merger.

Selected Precedent Transactions Analysis

Greenhill performed an analysis of selected business combinations involving target companies engaged in the health care equipment and supplies and life sciences tool industry since 2005 with transaction values between \$100 million and \$20 billion.

The following table identifies the transactions reviewed by Greenhill in this analysis:

| Date Announced | Target | Acquiror |
|-----------------------|---------------------------------------|--------------------------------------|
| 7/25/2007 | Dade Behring Holdings | Siemens Medical Solutions |
| 6/25/2007 | Ventana Medical Systems, Inc. | Roche Holding AG |
| 6/4/2007 | Cholestech Corp. | Inverness Medical Innovations, Inc. |
| 6/3/2007 | Digene Corp. | Qiagen NV |
| 5/21/2007 | Cytoc Corp. | Hologic Inc |
| 5/16/2007 | Diamed Holding AG | Bio-Rad Laboratories, Inc. |
| 4/4/2007 | Biosite Incorporated | Inverness Medical Innovations, Inc. |
| 2/28/2007 | Dako A/S | EQT Partners, EQT Fund V |
| 2/11/2007 | Adeza Biomedical Corp. | Cytoc Corp. |
| 1/28/2007 | Molecular Devices Corp. | MDS Inc. |
| 11/17/2006 | Phadia AB | Cinven Group Ltd. |
| 10/8/2006 | Vision Systems Ltd. | Danaher Corp. |
| 10/3/2006 | Lumigen, Inc. | Beckman Coulter, Inc. |
| 9/8/2006 | TriPath Imaging Inc. | Becton Dickinson & Co. |
| 6/29/2006 | Bayer Healthcare Diagnostic Division | Siemens Medical Solutions |
| 6/20/2006 | Biacore International AB | GE Healthcare |
| 5/7/2006 | Fisher Scientific International Inc. | Thermo Fisher Scientific, Inc. |
| 4/27/2006 | Diagnostic Products Corp. | Siemens Medical Solutions |
| 4/25/2006 | Serologicals Corp. | Millipore Corp. |
| 3/16/2006 | Athena Diagnostics, Inc. | Fisher Scientific International Inc. |
| 2/24/2006 | ACON Labs Inc. | Inverness Medical Innovations, Inc. |
| 10/7/2005 | Diagnostic Systems Laboratories, Inc. | Beckman Coulter, Inc. |
| 9/1/2005 | Chiron Corp. | Novartis AG |
| 7/25/2005 | BioSource International | Invitrogen Corp. |
| 4/27/2005 | Agencourt Bioscience Corp. | Beckman Coulter, Inc. |
| 3/18/2005 | CTI Molecular Imaging, Inc. | Siemens Medical Solutions |

Using publicly available information, including company filings, Greenhill reviewed the consideration paid in the selected transactions and analyzed the enterprise value implied by such consideration as a multiple of both EBITDA and revenue for the twelve month period prior to the target company's most recently completed fiscal quarter end preceding the announcement of the applicable transaction. Greenhill then applied these multiples to ABI in order to derive an implied per share equity value range for ABI. For purposes of calculating ABI's implied per share equity value ranges for this analysis, Greenhill assumed a net cash position of \$239.7 million and a fully diluted share count of 175.1 million shares of Applied Biosystems stock based on the treasury stock method.

This methodology resulted in an implied per share equity value range of \$39.26 to \$55.04 for ABI. Greenhill compared this range to the per share merger consideration of \$37.85 to be received by holders of Applied Biosystems stock in the merger.

Table of Contents

Premiums Paid Analysis

Based on the transactions reviewed in the Selected Precedent Transactions Analysis above, Greenhill reviewed the premiums represented by the per share acquisition price in each selected transaction as compared to the closing share price of the target company one day, one week and one month prior to the announcement of such selected transaction. Greenhill observed that for the selected precedent transactions Greenhill reviewed, the mean and median premium over the closing share price of the target on the day prior to announcement was 34.5% and 32.2%, respectively, the mean and median premium over the closing share price of the target one week prior to announcement was 37.2% and 34.8%, respectively, and the mean and median premium over the closing share price of the target one month prior to announcement was 48.5% and 33.5%, respectively.

Greenhill also reviewed the premiums paid in all transactions announced since 2005 with a deal value between \$100 million and \$20 billion, excluding transactions where negative premiums were reported or where premiums data was unavailable. Based on these transactions, Greenhill reviewed the premiums represented by the per share acquisition price in each selected transaction as compared to the closing share price of the target company one day, one week and one month prior to the announcement of such selected transaction. Greenhill observed that for these transactions, the mean and median premium over the closing share price of the target on the day prior to announcement was 29.3% and 21.2%, respectively, the mean and median premium over the closing share price of the target one week prior to announcement was 32.1% and 24.5%, respectively, and the mean and median premium over the closing share price of the target one month prior to announcement was 35.5% and 27.9%, respectively.

Based on this analysis, Greenhill applied a summary range based on the mean and median one-day premiums for the transactions described above to the unaffected share price of Applied Biosystems stock, based on the closing price of \$29.77 per share on April 24, 2008, one day prior to the announcement by SAC Capital Advisors of its 5.1% ownership stake in Applied Biosystems stock, in order to derive an implied per share value range for Applied Biosystems.

This methodology resulted in an implied per share value range of \$37.21 to \$40.19 for Applied Biosystems. Greenhill compared this range to the per share merger consideration of \$37.85 to be received by holders of Applied Biosystems stock in the merger.

Greenhill further observed that the per share merger consideration of \$37.85 represented a premium of 27.1% over the closing price of Applied Biosystems stock on April 24, 2008, one day prior to the announcement by SAC Capital Advisors of its 5.1% ownership stake in Applied Biosystems stock.

Miscellaneous

ABI's board of directors selected Greenhill as its financial advisor based on Greenhill's qualifications, experience and reputation. In addition, ABI retained Greenhill because Morgan Stanley, or one of its affiliates, was considering a role in the financing of the proposed transaction. Greenhill is an internationally recognized investment banking firm that is regularly engaged in the valuation of businesses and securities in connection with mergers, acquisitions, restructurings and similar corporate finance transactions.

Greenhill was not requested to and did not provide advice concerning the structure, the specific amount or form of consideration or any other aspect of the sale of ABI or any other transaction. Greenhill was not requested to and did not assist ABI's board of directors in its evaluation of alternatives for, or participate in any process undertaken on behalf of, ABI, including the solicitation of expressions of interest from, or preliminary discussions with, third parties regarding the potential acquisition of ABI or in the negotiations of the terms of the acquisition. Greenhill was not requested to and did not provide any advice or services in connection with the merger other than the delivery of its opinion, and Greenhill did not express an opinion as to whether any alternative transaction might produce consideration for ABI in an amount in excess of that contemplated in the merger. Greenhill's opinion was approved by its fairness committee.

Table of Contents

Under the terms of Greenhill's engagement with ABI, ABI agreed to pay Greenhill an advisory fee which was payable on the date of Greenhill's engagement and an opinion fee which was payable upon delivery of its opinion. Such fees, which amount in the aggregate to \$1.5 million, have been paid. In addition, ABI has agreed to reimburse Greenhill for reasonable travel and other out-of-pocket expenses incurred by Greenhill, including reasonable fees and expenses of legal counsel, and to indemnify Greenhill and related parties against liabilities relating to or arising out of Greenhill's engagement.

Financial Projections

ABI's management does not as a matter of course make public projections as to future performance or earnings beyond the current fiscal year and is especially wary of making projections for any earnings period because of the inherent uncertainty of the underlying assumptions and estimates. Certain financial forecasts prepared by ABI's management, however, were made available to ABI's board of directors, Morgan Stanley and Greenhill, and Invitrogen and Invitrogen's financial advisors in connection with the merger. The material portions of these projections set forth below are included in this joint proxy statement/prospectus to provide holders of Invitrogen common stock and Applied Biosystems stock access to certain non-public information considered by ABI's board of directors or Invitrogen for purposes of considering and evaluating the merger. The inclusion of this information should not be regarded as an indication to any stockholder that ABI's board of directors, Invitrogen, or any other recipient of this information considered, or now considers, it to be predictive of actual future results. The projections reflect numerous estimates and assumptions with respect to industry performance, general business, economic, regulatory, market, and financial conditions, as well as other factors and matters specific to ABI's business, including those described above under the caption "Cautionary Statement Concerning Forward-Looking Statements," many of which are beyond ABI's control. As a result, there can be no assurance that the projected results will be realized or that actual results will not be significantly higher or lower than projected. Since the projections cover multiple years, such information by its nature becomes less certain with each successive year. In addition, the projections do not reflect the effect of the merger or any other combination of ABI's business with the business conducted by Invitrogen.

The projections set forth below were prepared by, and is the responsibility of, ABI's management, solely for the use of ABI's board of directors and were provided to Invitrogen and the financial advisors of ABI and Invitrogen in connection with the potential transaction and were not prepared with a view toward public disclosure or compliance with generally accepted accounting principles, or GAAP, or with published guidelines of the SEC or the guidelines established by the American Institute of Certified Public Accountants regarding forecasts or projections. Neither ABI's independent registered public accounting firm nor any other independent accountants have compiled, examined, or performed any procedures with respect to the projected financial information contained herein, nor have they expressed any opinion or any other form of assurance on such information or its achievability, and they assume no responsibility for, and disclaim any association with, the prospective financial information. The reports of PricewaterhouseCoopers LLP included in documents that are incorporated by reference in this joint proxy statement/prospectus relate to ABI's historical financial information. They do not extend to the projected financial information and should not be read to do so.

Furthermore, the financial projections do not take into account any circumstances or events occurring after the date the projections were prepared that were unforeseen by ABI's management at the time of preparation. ABI has made publicly available its actual results of operations for the fiscal year ended June 30, 2008. See the section entitled "Additional Information."

Readers of this joint proxy statement/prospectus are cautioned not to place undue reliance on the projections set forth below. No one has made or makes any representation to any holder of either Applied Biosystems stock or Invitrogen common stock regarding the information included in these projections. The inclusion of projections in this joint proxy statement/prospectus should not be regarded as an indication that such projections will be realized. Except as required by applicable securities laws, ABI undertakes no obligation to update, or otherwise revise the projections to reflect circumstances existing after the date when made or to reflect the occurrence of

Table of Contents

future events, even in the event that any or all of the estimates and assumptions on which management relied are shown to be in error.

Set forth below is a summary of certain projected financial data (in millions) for ABI prepared by ABI's management and provided to Morgan Stanley, Greenhill, Invitrogen and Invitrogen's financial advisors.

| | Year Ended June 30, | | |
|---------------------------------|---------------------|----------|----------|
| | 2008E | 2009E | 2010E |
| Total Revenue | \$ 2,211 | \$ 2,315 | \$ 2,431 |
| Non-GAAP Operating Income | 428 | 451 | 477 |
| Non-GAAP EBIT ⁽¹⁾⁽²⁾ | 431 | 451 | 477 |
| Non-GAAP Net Income | \$ 304 | \$ 341 | \$ 377 |

- (1) EBIT is defined as earnings before interest and income taxes.
- (2) EBIT is not a measure of performance under GAAP and should not be considered a substitute for measurements prepared in accordance with GAAP. ABI's management analyzes EBIT because it believes EBIT provides useful information to management and investors regarding various financial and business trends relating to ABI's financial condition and results of operations.

Regulatory Approvals

The merger is subject to review by the DOJ and the FTC under the HSR Act. Under the HSR Act, Invitrogen and ABI were required to make pre-merger notification filings and to await the expiration or early termination of the statutory waiting period prior to completing the merger. The notifications required under the HSR Act to the FTC and the DOJ were filed on June 26, 2008 by both Invitrogen and ABI, and the statutory waiting period under the HSR Act expired at 11:59 p.m. on Monday, July 28, 2008. The transaction is also subject to the expiration or termination of the applicable waiting period under the ECMR as well as the approval of competition regulatory authorities in several other countries.

At any time before or after completion of the merger, either the DOJ, the FTC or any state attorneys general could challenge, seek to block or block the merger under the antitrust laws, as it deems necessary or desirable in the public interest. Other competition agencies (including foreign governmental authorities) could also initiate action to challenge or block the merger. In addition, in some jurisdictions, a private party could initiate legal action under the antitrust laws challenging or seeking to enjoin the merger, before or after it is completed. Invitrogen and ABI cannot be sure that a challenge to the merger will not be made or that, if a challenge is made, Invitrogen and ABI will prevail.

Accounting Treatment

In accordance with GAAP, Invitrogen will account for the merger as a purchase business combination. Upon the completion of the merger, Invitrogen will record the cash consideration, the market value of its common stock issued in the merger and the amount of direct transaction costs associated with the merger, as the estimated purchase price of acquiring ABI. Invitrogen will allocate the estimated purchase price to the tangible and identifiable intangible assets acquired and liabilities assumed based on their respective fair values at the effective time of the merger. Any excess of the estimated purchase price over the fair value of net assets acquired will be accounted for as goodwill.

In accordance with the Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets, which is referred to as SFAS 142, goodwill resulting from the purchase business combination will not be amortized but instead will be tested for impairment at least annually (more frequently if certain indicators are present). In the event that Invitrogen management determines that the value of goodwill has become impaired, the combined company will incur an accounting charge for the amount of impairment during the fiscal quarter in which the determination is made.

Table of Contents

Listing of Invitrogen Common Stock

Application will be made to have the shares of Invitrogen common stock to be issued in the merger approved for listing on the NASDAQ Global Select Market, where Invitrogen common stock currently is traded under the symbol IVGN.

Appraisal Rights

Under Delaware law, holders of Invitrogen common stock are not entitled to appraisal rights in connection with the issuance of Invitrogen common stock in the merger.

Holders of shares of Applied Biosystems stock who do not vote in favor of adopting the merger agreement and approving the merger and properly demand appraisal of their shares will be entitled to appraisal rights pursuant to the merger agreement under Section 262 of the DGCL.

Under Section 262 of the DGCL, where a merger is to be submitted for approval at a meeting of stockholders, as in the case of adopting the merger agreement and approving the merger by Applied Biosystems stockholders, the corporation, not less than 20 days prior to the meeting, must notify each of its stockholders entitled to appraisal rights that appraisal rights are available and include in the notice a copy of Section 262 of the DGCL. **This joint proxy statement/prospectus constitutes the notice, and the full text of Section 262 of the DGCL is attached to this joint proxy statement/prospectus as Annex H. Any holder of Applied Biosystems stock who wishes to exercise appraisal rights or who wishes to preserve such holder's right to do so, should review the following discussion and Annex H carefully because failure to timely and properly comply with the procedures specified will result in the loss of appraisal rights. Moreover, due to the complexity of the procedures for exercising the right to seek appraisal, Applied Biosystems stockholders who are considering exercising such rights are encouraged to seek the advice of legal counsel.**

The following is a brief discussion of the material provisions of the law pertaining to appraisal rights under Section 262 of the DGCL and is qualified in its entirety by reference to the full text of Section 262 of the DGCL, which is attached to this joint proxy statement/prospectus as Annex H. The following summary does not constitute any legal or other advice, nor does it constitute a recommendation that Applied Biosystems stockholders exercise their right to seek appraisal under Section 262 of the DGCL. All references in Section 262 of the DGCL and in this summary to a stockholder are to the record holder of the shares of Applied Biosystems stock as to which appraisal rights are asserted. A person having a beneficial interest in shares of Applied Biosystems stock held of record in the name of another person, such as a broker, fiduciary, depositary or other nominee, must act promptly to cause the record holder to follow the steps summarized below properly and in a timely manner to perfect appraisal rights.

Under Section 262 of the DGCL, persons who hold shares of Applied Biosystems stock who do not vote in favor of adopting the merger agreement and approving the merger, and who otherwise follow the procedures set forth in Section 262 of the DGCL will be entitled to have their shares appraised by the Delaware Court of Chancery and to receive payment of the fair value of the shares, exclusive of any element of value arising from the accomplishment or expectation of the merger, together with a fair rate of interest, if any, as determined by the court.

Any Applied Biosystems stockholder wishing to exercise appraisal rights under Section 262 of the DGCL must:

deliver to ABI, before the vote on the adoption of the merger agreement and approval of the merger at the Applied Biosystems special meeting of stockholders, a written demand for the appraisal of the stockholder's shares;

not vote its shares of common stock in favor of adoption of the merger agreement and approval of the merger; and

Table of Contents

hold of record the shares of Applied Biosystems stock on the date the written demand for appraisal is made and continue to hold the shares of record through the effective time of the merger.

The holder seeking appraisal must not vote in favor of the approval and adoption of the merger agreement and approval of the merger. A proxy that is signed and does not contain voting instructions will, unless revoked, be voted in favor of the approval and adoption of the merger agreement and approval of the transaction, and it will constitute a waiver of the stockholder's right of appraisal and will nullify any previously delivered written demand for appraisal. Therefore, a stockholder who votes by proxy and who wishes to exercise appraisal rights must vote against the approval and adoption of the merger agreement and approval of the merger or abstain from voting on the merger agreement. Neither voting against the approval and adoption of the merger agreement and approval of the merger (in person or by proxy), nor abstaining from voting or failing to vote on the proposal to adopt the merger agreement and approve the merger will in and of itself constitute a written demand for appraisal satisfying the requirements of Section 262 of the DGCL.

The written demand for appraisal must be in addition to and separate from any proxy or vote. The demand must reasonably inform ABI of the identity of the holder as well as the intention of the holder to demand an appraisal of the fair value of the shares held by the holder. A stockholder's failure to make the written demand prior to the taking of the vote on the adoption of the merger agreement and approval of the merger at the Applied Biosystems special meeting of stockholders will constitute a waiver of appraisal rights.

Only a holder of record of shares of Applied Biosystems stock on the record date for the Applied Biosystems special meeting of stockholders is entitled to assert appraisal rights for the shares registered in that holder's name. A demand for appraisal in respect of shares of Applied Biosystems stock should be executed by or on behalf of the holder of record, fully and correctly, as the holder's name appears on the holder's stock certificates, and must state that the person intends to demand appraisal of the holder's shares pursuant to the merger agreement. If the shares are owned of record in a fiduciary capacity, such as by a trustee, guardian or custodian, execution of the demand should be made in that capacity. If the shares are owned of record by more than one person, as in a joint tenancy and tenancy in common, the demand should be executed by or on behalf of all joint owners. An authorized agent, including an agent for two or more joint owners, may execute a demand for appraisal on behalf of a holder of record. However, the agent must identify the record owner or owners and expressly disclose the fact that, in executing the demand, the agent is acting as agent for the record owner or owners. A record holder such as a broker who holds shares as nominee for several beneficial owners may exercise appraisal rights with respect to the shares held for one or more beneficial owners while not exercising the rights with respect to the shares held for other beneficial owners. In such case, however, the written demand should set forth the number of shares as to which appraisal is sought. If no number of shares is expressly mentioned, the demand will be presumed to cover all shares of Applied Biosystems stock held in the name of the record owner. Stockholders who hold their shares in brokerage accounts or other nominee forms and who wish to exercise appraisal rights are encouraged to consult with their brokers to determine the appropriate procedures for the making of a demand for appraisal by such a nominee.

All written demands for appraisal pursuant to Section 262 of the DGCL should be sent or delivered to Applied Biosystems Inc., 301 Merritt 7, Norwalk, Connecticut 06851, Attention: Corporate Secretary.

Within ten days after the effective time of the merger, ABI, or its successor in interest, which is referred to generally as the surviving company, must notify each holder of Applied Biosystems stock who has complied with Section 262 of the DGCL and who has not voted in favor of the adoption of the merger agreement and approval of the merger that the merger has become effective. Within 120 days after the effective time of the merger, but not thereafter, the surviving company or any holder of Applied Biosystems stock who has complied with Section 262 of the DGCL and is entitled to appraisal rights under Section 262 of the DGCL may file a petition in the Delaware Court of Chancery demanding a determination of the fair value of the shares held by all stockholders entitled to appraisal. The surviving company is under no obligation to and has no present intention to file a petition. Accordingly, it is the obligation of the holders of Applied Biosystems stock to initiate all

Table of Contents

necessary action to perfect their appraisal rights in respect of shares of Applied Biosystems stock within the time prescribed in Section 262 of the DGCL.

Within 120 days after the effective time of the merger, any holder of Applied Biosystems stock who has complied with the requirements for exercise of appraisal rights will be entitled, upon written request, to receive from the surviving company a statement setting forth the aggregate number of shares of Applied Biosystems stock not voted in favor of the adoption of the merger agreement and approval of the merger and with respect to which demands for appraisal have been received and the aggregate number of holders of such shares. The statement must be mailed within ten days after a written request has been received by the surviving company or within ten days after the expiration of the period for delivery of demands for appraisal, whichever is later.

If a petition for an appraisal is timely filed by a holder of shares of Applied Biosystems stock and a copy is served upon the surviving company, the surviving company will then be obligated within 20 days to file with the Delaware Register in Chancery a duly verified list containing the names and addresses of all dissenting stockholders who have demanded an appraisal of their shares and with whom agreements as to the value of their shares have not been reached. After notice to the dissenting stockholders as required by the Court, the Delaware Court of Chancery is empowered to conduct a hearing on the petition to determine those dissenting stockholders who have complied with Section 262 of the DGCL and who have become entitled to appraisal rights thereunder. The Delaware Court of Chancery may require the dissenting stockholders who demanded payment for their shares to submit their stock certificates to the Register in Chancery for notation on the certificates of the pending appraisal proceeding. If any dissenting stockholder fails to comply with the direction, the Delaware Court of Chancery may dismiss the proceedings as to that stockholder.

After determining the holders of Applied Biosystems stock entitled to appraisal, the Delaware Court of Chancery will appraise the fair value of their shares, exclusive of any element of value arising from the accomplishment or expectation of the merger, together with a fair rate of interest, if any, to be paid upon the amount determined to be the fair value. Stockholders considering seeking appraisal should be aware that the fair value of their shares as so determined could be more than, the same as or less than the consideration they would receive pursuant to the merger if they did not seek appraisal of their shares and that an investment banking opinion as to the fairness from a financial point of view of the consideration payable in a merger is not an opinion as to fair value under Section 262 of the DGCL. You should not expect the surviving company to offer more than the applicable merger consideration to any dissenting stockholder exercising appraisal rights, and Invitrogen reserves the right to assert, in any appraisal proceeding, that for purposes of Section 262 of the DGCL, the fair value of a share of Applied Biosystems stock is less than the applicable merger consideration.

Although ABI believes that the merger consideration is fair, no representation is made as to the outcome of the appraisal of fair value as determined by the Delaware Court of Chancery. Delaware courts have decided that the statutory appraisal remedy, depending on factual circumstances, may or may not be a dissenter's exclusive remedy. The Delaware Court of Chancery will determine the amount of interest, if any, to be paid upon the amounts to be received by persons whose shares of Applied Biosystems stock have been appraised. If a petition for appraisal is not timely filed, then the right to an appraisal will cease.

In determining fair value and, if applicable, a fair rate of interest, the Delaware Court of Chancery is to take into account all relevant factors. In *Weinberger v. UOP, Inc.*, the Delaware Supreme Court discussed the factors that could be considered in determining fair value in an appraisal proceeding, stating that proof of value by any techniques or methods which are generally considered acceptable in the financial community and otherwise admissible in court should be considered, and that fair price obviously requires consideration of all relevant factors involving the value of a company. The Delaware Supreme Court stated that, in making this determination of fair value, the court must consider market value, asset value, dividends, earnings prospects, the nature of the enterprise, and any other facts that could be ascertained as of the date of the merger that throw any light on future prospects of the merged corporation. Section 262 of the DGCL provides that fair value is to be

Table of Contents

exclusive of any element of value arising from the accomplishment or expectation of the merger. In *Cede & Co. v. Technicolor, Inc.* the Delaware Supreme Court stated that such exclusion is a narrow exclusion [that] does not encompass known elements of value, but which rather applies only to the speculative elements of value arising from such accomplishment or expectation. In *Weinberger*, the Delaware Supreme Court construed Section 262 of the DGCL to mean that elements of future value, including the nature of the enterprise, which are known or susceptible of proof as of the date of the merger and not the product of speculation, may be considered.

The costs of the action may be determined by the Delaware Court of Chancery and levied upon the parties as the Delaware Court of Chancery deems equitable. The Delaware Court of Chancery may also order that all or a portion of the expenses incurred by any stockholder in connection with an appraisal, including, without limitation, reasonable attorneys' fees and the fees and expenses of experts utilized in the appraisal proceeding, be charged pro rata against the value of all the shares entitled to be appraised.

Any holder of shares of Applied Biosystems stock who has demanded an appraisal in compliance with Section 262 of the DGCL will not, after the effective time of the merger, be entitled to vote the shares subject to the demand for any purpose or be entitled to the payment of dividends or other distributions on those shares, except dividends or other distributions payable to holders of record of Applied Biosystems stock as of a record date prior to the effective time of the merger.

Any dissenting stockholder may withdraw its demand for appraisal and accept the consideration offered pursuant to the merger agreement by delivering to the surviving company a written withdrawal of the demand for appraisal. However, any such attempt to withdraw the demand made more than 60 days after the effective date of the merger will require written approval of the surviving company. No appraisal proceeding in the Delaware Court of Chancery will be dismissed without the approval of the Delaware Court of Chancery, and such approval may be conditioned upon such terms as the Delaware Court of Chancery deems appropriate. If the surviving company does not approve a request to withdraw a demand for appraisal when that approval is required, or if the Delaware Court of Chancery does not approve the dismissal of an appraisal proceeding, the dissenting stockholder will be entitled to receive only the appraised value determined in any such appraisal proceeding, which value could be less than, equal to or more than the consideration being offered pursuant to the merger agreement.

If any dissenting stockholder who demands appraisal of shares of Applied Biosystems stock under Section 262 of the DGCL fails to perfect, or effectively withdraws or loses, such holder's right to appraisal, the dissenting stockholder's shares of Applied Biosystems stock will be deemed to have been converted at the effective time of the merger into the right to receive the merger consideration and such stockholder will be deemed to have made an election to receive mixed election consideration. A dissenting stockholder will fail to perfect, or effectively lose or withdraw, the dissenting stockholder's right to appraisal if no petition for appraisal is filed within 120 days after the effective time of the merger, or if the dissenting stockholder delivers to the surviving company a written withdrawal of the holder's demand for appraisal and an acceptance of the merger consideration, except that any attempt to withdraw made more than 60 days after the effective time of the merger will require the written approval of the surviving company and, once a petition for appraisal is filed, the appraisal proceeding may not be dismissed as to any holder absent approval of the Delaware Court of Chancery.

Failure to follow the steps required by Section 262 of the DGCL for perfecting appraisal rights may result in the loss of these rights. Consequently, any stockholder wishing to exercise appraisal rights is encouraged to consult with legal counsel prior to attempting to exercise such rights.

Delisting and Deregistration of Applied Biosystems Stock

If the merger is completed, Applied Biosystems stock will be delisted from the NYSE and deregistered under the Exchange Act and ABI will no longer file periodic reports with the SEC.

Table of Contents

Restrictions on Sales of Shares of Invitrogen Common Stock Received in the Merger

The shares of Invitrogen common stock to be issued in connection with the merger will be registered under the Securities Act and will be freely transferable, except for shares of Invitrogen common stock issued to any person who is deemed to be an affiliate of ABI under the Securities Act prior to the merger. Persons who may be deemed to be affiliates of ABI prior to the merger include individuals or entities that control, are controlled by, or are under common control with, ABI prior to the merger, and may include officers and directors, as well as significant stockholders of ABI prior to the merger. Affiliates of ABI prior to the merger may not sell any of the shares of Invitrogen common stock received by them in connection with the merger except pursuant to:

an effective registration statement under the Securities Act covering the resale of those shares; or

any applicable exemption under the Securities Act.

Invitrogen's registration statement on Form S-4, of which this joint proxy statement/prospectus is a part, does not cover the resale of shares of Invitrogen common stock to be received by affiliates of ABI in the merger.

Interests of Invitrogen's Directors and Executive Officers in the Merger

Invitrogen has change-in-control agreements for its chief executive officer and executive officers who report directly to the chief executive officer. The change-in-control agreements provide for cash severance and other benefits in the event of a qualifying termination following a change in control.

In order for an executive to be entitled to compensation and benefits under the applicable change-in-control agreement, there must be (1) a change in ownership and (2) a termination or constructive termination of employment of the executive by Invitrogen without cause or by the executive with good reason after the change in ownership. A transaction in which the holders of Invitrogen common stock prior to the transaction do not, after the transaction, own more than 60% of the resulting company's common stock triggers the change in ownership provision of the change-in-control agreements. The completion of the merger will constitute a change-in-ownership under the change-in-control agreements.

Under the change-in-control agreements, Invitrogen must employ the applicable executive for a period of two years following a change in ownership, or the employment period. Each executive is entitled to severance payments under the applicable change-in-control agreement if at any time during the employment period, Invitrogen or its successor terminates the executive without cause or the executive resigns for good reason, which includes a resignation by the executive because of:

a reduction in compensation and benefits;

diminution of position, authority, duties, or responsibilities;

a requirement that the executive relocate his or her principal place of employment more than 50 miles from the executive's principal place of employment prior to the change-in-ownership; or

an increase in travel requirements.

The compensation and benefits payable to each executive under the applicable change-in-control agreement in the event of termination of the executive's employment by Invitrogen without cause or by the executive for good reason following a change of control include:

Edgar Filing: INVITROGEN CORP - Form S-4/A

two times the executive's existing base salary;

the higher of the last bonus paid or the target bonus for the year of termination of employment;

up to twenty-four months of health insurance continuation through COBRA (which ceases should the executive accept a new position with health insurance coverage before the twenty-four month period ends);

outplacement assistance for nine months;

acceleration of vesting of all outstanding long-term incentive awards; and

Table of Contents

a tax gross-up if the payments under the change-in-control agreement is subject to Internal Revenue Code Section 4999 excise tax imposed for excess parachute payments in the amount of such excise tax penalty.

Invitrogen anticipates that following the merger, an internal restructuring of duties and responsibilities and the possible relocation of the principal place of employment of certain executive officers may occur. Under the terms of the change-in-control agreements, such internal restructuring or relocation may constitute a termination or constructive termination of the employment of certain executives by Invitrogen without cause or entitle each such executive to terminate his or her employment with good reason, entitling each such executive to severance payments. In order to prevent such an occurrence, each of Invitrogen's executive officers below the chief executive level who is a party to a change-in-control agreement has been asked to agree that any such internal restructuring or relocation will not result in the right of each such executive to receive severance payments under the applicable change-in-control agreement. In consideration for such agreements, affected executives are expected to receive new compensation packages.

Interests of ABI's Directors and Executive Officers in the Merger

In considering the recommendation of ABI's board of directors in favor of the approval and adoption of the merger agreement, holders of Applied Biosystems stock should be aware that certain of ABI's directors and executive officers have interests in the merger that may be different from, or in addition to, the interests of the holders of Applied Biosystems stock generally. These interests and arrangements may create potential conflicts of interest. ABI's board of directors was aware of these potential conflicts of interest and considered them as it deliberated on the merits of the merger and reached a determination to recommend that holders of Applied Biosystems stock vote for the proposal to approve and adopt the merger agreement.

Change in Control Severance Arrangements

Between September 1995 and September 2007, ABI entered into change in control agreements with Tony L. White, ABI's Chairman and Chief Executive Officer, Dennis L. Winger, ABI's Senior Vice President and Chief Financial Officer, William B. Sawch, ABI's Senior Vice President and General Counsel, Barbara J. Kerr, ABI's Senior Vice President Human Resources, Mark P. Stevenson, ABI's President and Chief Operating Officer, and Ugo D. De Blasi, ABI's Vice President and Corporate Controller, which provide these executive officers with severance benefits upon termination of employment following a change in control of ABI. On September 12, 1995 (as amended on August 26, 2006), ABI also entered into an employment agreement with Mr. White that provides for non-change in control severance benefits following a qualifying termination of employment. Other officers of ABI may participate in a change in control severance program established pursuant to the terms of the merger agreement, as described below under the caption Executive Severance Pay Policy. Collectively, we refer to these agreements and other arrangements as ABI's change in control severance arrangements. A number of other officers of ABI who are not executive officers also have change in control agreements similar to the agreements described in this section.

The change in control severance arrangements provide for cash severance and other benefits in the event of a qualifying termination of employment following a change in control. Completion of the merger will constitute a change in control for purposes of the change in control severance arrangements.

Under each of the change in control agreements, ABI must employ the applicable executive officer for a period of three years following a change in control of ABI, subject to automatic extension for each week in which the executive's employment continues after the change in control until the executive:

attains age 65,

retires,

dies,

Table of Contents

becomes disabled,

is terminated for cause, or

terminates employment without good reason.

We refer to this employment period following a change in control as the period of employment. Each executive officer will be entitled to severance payments under the applicable change in control agreement if at any time during the period of employment, ABI or its successor terminates the executive's employment without cause or the executive resigns for good reason. As used in the change in control agreements, good reason means:

an adverse change in status or position,

a reduction in salary,

a material decrease in total annual compensation,

failure to continue any benefit plan in which the executive officer was a participant, or

a requirement that the executive relocate his or her principal place of employment more than fifty (50) miles from the executive's principal place of employment prior to the change in control.

The compensation and benefits payable under the change in control severance arrangements include the following:

Change in Control Agreement with Mr. White

Accrued base salary and benefits through the month of termination and a pro rated payment under ABI's incentive compensation program;

A lump-sum payment equal to 300% of Mr. White's base salary, which for this purpose is deemed to include an amount equal to the greater of (1) the fair market value of 48,000 shares of Applied Biosystems stock and 12,000 shares of Celera Corporation common stock or (2) \$400,000;

A lump-sum payment equal to 300% of the greater of (1) the average amount of incentive compensation paid to Mr. White over the three fiscal years preceding termination or (2) Mr. White's target amount of incentive compensation for the year of the termination;

Continued participation, at active employee rates, in employee benefit plans for three years, or if continued participation is not possible, provision of identical benefits plus a gross-up payment;

Edgar Filing: INVITROGEN CORP - Form S-4/A

Three additional years of service credit under ABI's pension plan and certain non-qualified supplemental retirement plans in which Mr. White participates; and

Payment of any excise tax imposed by Section 4999 of the Internal Revenue Code and related income tax gross-ups if any of the amounts payable under the agreement, or otherwise, are subject to the excise tax imposed by Section 4999 of the Internal Revenue Code.

Change in Control Agreements with the Other Executive Officers

Accrued salary and benefits through the end of the month of termination and a pro rated payment under ABI's incentive compensation program;

A lump-sum payment equal to the greater of (1) the executive's base salary plus the greater of (a) the executive's average amount of incentive compensation paid over the three fiscal years preceding termination, (b) the executive's target amount of incentive compensation for the year of the termination, or (c) executive's target amount of incentive compensation for the year of the change in control, such base salary and incentive compensation being collectively referred to as the cash compensation, for the remaining term of the agreement, or (2) two times the executive's cash compensation;

Table of Contents

Continued participation at active-employee rates, in employee benefit plans, or if continued participation is not possible, provision of identical benefits plus a gross-up payment for the greater of the remaining period of employment or two years;

Three additional years of service credit under certain non-qualified supplemental retirement plans in which the executives participate; and

Payment of any excise tax imposed by Section 4999 of the Internal Revenue Code and related income tax gross-ups if any of the amounts payable under the agreements, or otherwise, are subject to the excise tax imposed by Section 4999 of the Internal Revenue Code.

Assuming, for purposes of this calculation only, the merger is completed on October 30, 2008, and each executive officer's employment is terminated on October 31, 2008, the estimated cost of the cash severance benefits described above would be as follows:

| Executive Officer | Severance Amount (1) | Excise Tax Gross-up | Total |
|-------------------|----------------------|---------------------|---------------|
| Tony L. White | (2) | (2) | (2) |
| Dennis L. Winger | \$ 8,170,884 | \$ 3,827,843 | \$ 11,998,727 |
| William B. Sawch | \$ 6,136,322 | \$ 3,092,176 | \$ 9,228,498 |
| Mark P. Stevenson | \$ 5,084,997 | \$ 3,510,810 | \$ 8,595,807 |
| Barbara Kerr | \$ 4,411,978 | \$ 2,763,982 | \$ 7,175,960 |
| Ugo D. DeBlasi | \$ 1,918,332 | \$ 1,025,061 | \$ 2,943,393 |

- (1) Severance amounts include the value of benefits continuation for health and dental plans (less employee contributions), life insurance, long term disability insurance, automobile allowances, financial planning allowances (except in the case of Mr. White), annual physical examination allowance, 401(k) company match, employee stock purchase plan discount, excess liability insurance, and a gross up for taxes on those benefits which may be taxable to the individual, where they were not previously taxable to the individual.
- (2) Mr. White has raised questions regarding the correct interpretation of his change in control arrangements. Depending on the interpretation of his arrangements, Mr. White would be entitled to receive payments ranging from approximately \$19.8 million to \$44 million, plus a gross up for any excise tax due on such amounts ranging from approximately \$10 million to \$22 million. Invitrogen has been of the view that, under his change of control arrangements, Mr. White would not be entitled to payments at the high end of that range. However, the correct interpretation of Mr. White's arrangements has not been decided, and ABI will work together with Invitrogen to resolve this matter as promptly as practicable.

The estimated amounts shown above are based on salaries as of September 4, 2008, and as described above, the average incentive compensation for fiscal 2006, 2007, 2008, or fiscal year 2009 incentive compensation targets, if greater. The actual severance amounts will be determined at the time of termination based on the terms of the agreements described previously. Calculations assume a share price of \$38 for Applied Biosystems stock and \$14.18 (the closing price on September 4, 2008) for Celera Corporation common stock.

Executive Severance Pay Policy. Pursuant to the merger agreement, ABI established the Executive Severance Pay Policy to provide severance benefits to employees holding the title of vice president and above. Pursuant to this policy, eligible employees who are terminated without cause or who resign for good reason (each as defined in the policy), within two years following the merger will receive a lump-sum payment equal to 12 or 18 months (depending upon grade level) of base salary and target bonus. Employees also receive the lump-sum value and income tax gross-up for medical and dental benefits for the 12- or 18-month severance period and outplacement assistance. Employees who are parties to the change in control severance agreements described above are ineligible for benefits under this policy. Accordingly, none of ABI's executive officers is expected to receive severance benefits under this policy.

Table of Contents

Retention Programs. The merger agreement permits ABI to establish a Retention Program for the purpose of retaining the services of key employees, including executive officers. The aggregate amount of the Retention Program will not exceed \$12 million, and the program will not continue beyond three months after the completion of the merger. The merger agreement also permits ABI to grant supplemental retention awards if ABI's executive officers reasonably determine that additional awards are necessary. As of the date of this joint proxy statement/prospectus, no such awards have been granted to any executive officer.

The Retention Program and Executive Severance Pay Policy are described in greater detail in the section of this joint proxy statement/prospectus captioned "The Merger Agreement, Covenants and Agreements, ABI's Benefit Plans."

Continued Service with Invitrogen Following the Merger

Membership on Invitrogen's Board of Directors. On or prior to the effective time of the merger, the board of directors of Invitrogen will cause the number of directors that will constitute the entire board of directors of Invitrogen immediately following the effective time to be twelve. At the effective time of the merger, it is currently expected that three current directors of ABI mutually agreed upon by Invitrogen and ABI will be appointed to serve as directors of Invitrogen. The three former directors of ABI will each be placed in a different class of the board of directors of Invitrogen.

Appointment of Mr. Stevenson as President and Chief Operating Officer. Following the effective time of the merger, Mark P. Stevenson, currently President and Chief Operating Officer of ABI, will be appointed President and Chief Operating Officer of Invitrogen.

Effect on Awards Outstanding Under Equity Compensation Plans

Treatment of Unvested Options. Immediately prior to the completion of the merger, each outstanding unexpired and unexercised option to purchase or acquire shares of Applied Biosystems stock, whether or not then vested or subject to any performance condition, will vest and become fully exercisable. In addition, each outstanding unexpired and unexercised option to purchase or acquire shares of Celera Corporation common stock held by an employee of ABI, whether or not then vested or subject to any performance condition, will vest and become fully exercisable.

With respect to options to acquire Applied Biosystems stock, the shares subject to each option will be treated as if the option holder made an election to receive all stock consideration in the merger, which we refer to as a "Stock Election," and each such option will be converted into an option to purchase the number of shares of Invitrogen common stock equal to the product of 0.8261 (the exchange ratio of Applied Biosystems stock for Invitrogen common stock applicable to stockholders who elect to receive stock consideration in the merger) multiplied by the number of shares that were subject to the old Applied Biosystems option (rounded down to the nearest whole share), at an exercise price per share equal to the exercise price of the old option divided by the stock election exchange ratio of 0.8261 (rounded up to the nearest cent). In the event that there is a cash adjustment to the stock election and mixed election merger consideration because the 20-Day VWAP of the Invitrogen common stock is between \$43.69 and \$46.00, then the percentage of a share of Invitrogen common stock issuable upon exercise of an option will be increased to give option holders the benefit of the adjustment to the stock exchange ratio, and the exercise price of the option will be proportionately reduced. All other terms of ABI's stock option agreements will continue to apply to the converted, vested options to purchase shares of Invitrogen common stock following the merger. Invitrogen will reserve a sufficient number of shares of Invitrogen common stock for issuance upon the exercise of the converted stock options.

Under the terms of the Celera separation agreement, outstanding and unexercised options to acquire Celera group common stock have been exchanged for options to acquire the same number of shares of common stock of Celera Corporation, at the same exercise price and subject to substantially the same terms and conditions.

Table of Contents

(including those relating to vesting), as the prior option to acquire shares of Celera group common stock. In connection with the Celera separation, Celera Corporation assumed all of these outstanding Celera group option grants. Under the terms of the equity compensation plan governing the new Celera Corporation options, upon a change in control of ABI such as the merger, all such option grants will vest and become exercisable.

The following table sets forth, as of September 4, 2008:

the number of unvested options to acquire shares of Applied Biosystems stock held by ABI's directors and executive officers and the approximate value of the unvested options to acquire Applied Biosystems stock (based on an assumed value per share of Applied Biosystems stock immediately prior to the closing of the merger of \$35.89, which was the closing price per share of Applied Biosystems stock on September 4, 2008, which value may vary), and

the number of unvested options to acquire shares of Celera Corporation common stock held by ABI's directors and executive officers and the approximate value of the unvested options to acquire Celera Corporation common stock (based on an assumed value per share of Celera Corporation common stock immediately prior to the closing of the merger of \$14.18, which was the closing price per share of Celera Corporation common stock on September 4, 2008, which value may vary):

| Name | Unvested Options (Number of Shares) | | Weighted Average Exercise Price | | Approximate Value of Unvested Options | |
|-------------------------------------|--|--------------------------------|------------------------------------|--------------------------------|--|--------------------------------|
| | Applied Biosystems Stock | Celera Corporation Stock | Applied Biosystems Stock | Celera Corporation Stock | Applied Biosystems Stock | Celera Corporation Stock |
| <i>Directors</i> | | | | | | |
| George F. Adam Jr. | 9,000 | 3,600 | \$ 34.1050 | \$ 15.7100 | \$ 16,065.00 | \$ 0 |
| Robert H. Hayes ⁽¹⁾ | 20,250 | 8,100 | \$ 29.5440 | \$ 11.7750 | \$ 71,392.50 | \$ 4,329 |
| Arnold J. Levine ⁽¹⁾ | 20,250 | 8,100 | \$ 29.5440 | \$ 11.7750 | \$ 71,392.50 | \$ 4,329 |
| William H. Longfield ⁽¹⁾ | 20,250 | 8,100 | \$ 29.5440 | \$ 11.7750 | \$ 71,392.50 | \$ 4,329 |
| Elaine R. Mardis | 9,000 | 3,600 | \$ 35.9850 | \$ 15.9150 | \$ 0.00 | \$ 0 |
| Theodore E. Martin ⁽¹⁾ | 20,250 | 8,100 | \$ 29.5440 | \$ 11.7750 | \$ 71,392.50 | \$ 4,329 |
| Carolyn W. Slayman ⁽¹⁾ | 20,250 | 8,100 | \$ 29.5440 | \$ 11.7750 | \$ 71,392.50 | \$ 4,329 |
| James R. Tobin ⁽¹⁾ | 20,250 | 8,100 | \$ 29.5440 | \$ 11.7750 | \$ 71,392.50 | \$ 4,329 |
| <i>Executive Officers</i> | | | | | | |
| Tony L. White | 147,000 | 63,000 | \$ 34.6250 | \$ 15.3250 | \$ 185,955.00 | \$ 0 |
| Dennis L. Winger | 42,000 | 18,000 | \$ 34.6250 | \$ 15.3250 | \$ 53,130.00 | \$ 0 |
| William B. Sawch | 42,000 | 18,000 | \$ 34.6250 | \$ 15.3250 | \$ 53,130.00 | \$ 0 |
| Barbara J. Kerr | 42,000 | 18,000 | \$ 34.6250 | \$ 15.3250 | \$ 53,130.00 | \$ 0 |
| Mark P. Stevenson | 60,000 | 0 | \$ 34.6250 | | \$ 75,900.00 | |
| Ugo D. DeBlasi | 14,025 | 7,500 | \$ 34.6250 | \$ 15.3250 | \$ 17,741.63 | \$ 0 |

(1) In order to more accurately show the approximate value of the unvested options, the weighted average exercise prices have been adjusted to remove options with an exercise price above the market value of the shares as of September 4, 2008.

Treatment of Restricted Shares and Restricted Stock Units. Pursuant to the merger agreement and immediately prior to the completion of the merger, each outstanding restricted share of Applied Biosystems stock and each outstanding right to receive Applied Biosystems stock pursuant to a restricted stock unit award, whether or not subject to any performance condition, will vest in full and all restrictions with respect to such awards will lapse. Holders of restricted shares of Applied Biosystems stock and restricted stock unit awards will be treated as having elected to receive a combination of cash and stock consideration in the merger, which we refer to as a "Mixed Election," and will be entitled to receive \$17.10 in cash, subject to increase under some circumstances, and 0.4543 of a share of Invitrogen common stock for each outstanding restricted share of Applied Biosystems stock held by the holder and each outstanding share of Applied Biosystems stock the holder has a right to receive pursuant to a restricted stock unit award. The amount of cash received by holders electing to receive all or a

Table of Contents

portion of the merger consideration in cash is subject to increase as described in this joint proxy statement/prospectus under the caption "The Merger Agreement - Merger Consideration."

Under the terms of the Separation Agreement relating to the Celera separation, each outstanding restricted share of Celera group common stock and each outstanding right to receive Celera group common stock pursuant to a restricted stock unit award has been exchanged for an award to be settled in the same number of shares of Celera Corporation common stock, for the same remaining period and subject to substantially the same terms and conditions (including those relating to vesting), as the prior award for shares of Celera group common stock. In connection with the Celera separation, Celera assumed all of these outstanding Celera group restricted stock and restricted stock unit awards. Under the terms of equity compensation plan governing the new Celera Corporation restricted stock and restricted stock unit awards, upon a change in control of ABI such as the merger, all such awards, whether or not subject to any performance condition, will vest and become exercisable or will settle or become payable in full.

The following table sets forth, as of September 4, 2008:

the number of restricted shares of Applied Biosystems stock and rights to receive Applied Biosystems stock pursuant to restricted stock unit awards held by ABI's directors and executive officers, and the approximate value of those awards (based on an assumed value per share of Applied Biosystems stock immediately prior to the closing of the merger of \$35.89, which was the closing price per share of Applied Biosystems stock on September 4, 2008, which value may vary); and

the number of restricted shares of Celera Corporation common stock and rights to receive Celera Corporation common stock pursuant to restricted stock unit awards held by ABI's directors and executive officers, and the approximate value of those awards (based on an assumed value per share of Celera Corporation common stock immediately prior to the closing of the merger of \$14.18, which was the closing price per share of Celera Corporation common stock on September 4, 2008, which value may vary):

| Name | Shares of Restricted Stock and Rights to Receive Common Stock Pursuant to Restricted Stock Unit Awards held by Directors and Executive Officers | | Approximate Value of Restricted Stock and Unvested Restricted Stock Unit Awards | |
|---------------------------|---|--------------------------|---|--------------------------|
| | Applied Biosystems Stock | Celera Corporation Stock | Applied Biosystems Stock | Celera Corporation Stock |
| <i>Directors</i> | | | | |
| George F. Adam Jr. | 2,600 | 1,000 | \$ 93,314.00 | \$ 14,180.00 |
| Robert H. Hayes | 2,600 | 1,000 | \$ 93,314.00 | \$ 14,180.00 |
| Arnold J. Levine | 2,600 | 1,000 | \$ 93,314.00 | \$ 14,180.00 |
| William H. Longfield | 2,600 | 1,000 | \$ 93,314.00 | \$ 14,180.00 |
| Elaine R. Mardis | 2,600 | 1,000 | \$ 93,314.00 | \$ 14,180.00 |
| Theodore E. Martin | 2,600 | 1,000 | \$ 93,314.00 | \$ 14,180.00 |
| Carolyn W. Slayman | 2,600 | 1,000 | \$ 93,314.00 | \$ 14,180.00 |
| James R. Tobin | 2,600 | 1,000 | \$ 93,314.00 | \$ 14,180.00 |
| <i>Executive Officers</i> | | | | |
| Tony L. White | 167,910 | 89,290 | \$ 6,026,289.90 | \$ 1,266,132.20 |
| Dennis L. Winger | 40,350 | 24,055 | \$ 1,448,161.50 | \$ 341,099.90 |
| William B. Sawch | 29,115 | 19,240 | \$ 1,044,937.35 | \$ 272,823.20 |
| Barbara J. Kerr | 27,615 | 17,640 | \$ 991,102.35 | \$ 250,135.20 |
| Mark P. Stevenson | 57,600 | 0 | \$ 2,067,264.00 | |
| Ugo D. DeBlasi | 15,210 | 6,090 | \$ 545,886.90 | \$ 86,356.20 |

Table of Contents

Performance Unit Bonus Plan. Some of ABI's executive officers will receive accelerated payment of outstanding awards under ABI's Performance Unit Bonus Plan. Pursuant to this plan, all awards will vest and all price targets will be deemed satisfied upon completion of the merger. The following table sets forth the amounts that will be accelerated under ABI's Performance Unit Bonus Plan, assuming that the merger is completed on October 30, 2008.

| Executive Officer | Accelerated Payment Amount |
|--------------------------|-----------------------------------|
| Tony L. White | \$ 1,000,000 |
| Dennis L. Winger | \$ 500,000 |
| William B. Sawch | \$ 500,000 |
| Barbara J. Kerr | \$ 250,000 |
| Mark P. Stevenson | |
| Ugo D. DeBlasi | |

Other Benefits

Supplemental Executive Retirement Plan. Upon a termination of employment in connection with a change in control, consistent with ABI's standard change in control agreement, discussed above, participants under ABI's Supplemental Executive Retirement Plan will be credited with three additional years of service for all purposes under the plan. The definition of compensation used to determine a participant's benefit under the plan will be based upon the 12 calendar months preceding the change in control, if this results in a greater benefit to the participant. Pursuant to the merger agreement, ABI and Invitrogen have agreed that the merger will constitute a change in control for purposes of the Supplemental Executive Retirement Plan.

Supplemental Retirement Plan. ABI has a frozen non-qualified Supplemental Retirement Plan that provides a benefit equal to 1.5% of awards paid to a participant under ABI's Incentive Compensation Program prior to July 1, 1995. If within three years of a change in control of ABI such as the merger, the participant is terminated without cause or resigns for good reason, the participant will be entitled to a payment of his or her accrued annual retirement benefit commencing on or after the date the participant attains age 55.

Rabbi Trusts. Pursuant to the merger agreement, at or prior to the merger, ABI will determine the amount of the payments to be made to executive officers and other employees pursuant to ABI's benefit plans and individual agreements to the extent such payments are to be made from ABI's rabbi trust arrangements. ABI will then deposit additional amounts into the rabbi trusts maintained by ABI for the purposes of satisfying its obligations to make payments to its executive officers and other employees following the merger. Invitrogen has agreed (1) to make all payments to ABI's executive officers and other employees as are contemplated as being made from the rabbi trusts, and (2) not to seek to withdraw funds from the rabbi trusts or to challenge ABI's board of directors regarding its decision with respect to the nature, amount, or timing of any funding of the rabbi trusts. The rabbi trusts are described in greater detail in the section of this proxy statement/prospectus captioned "The Merger Agreement Covenants and Agreements ABI's Benefit Plans."

Transition Services Agreement with Tony L. White. ABI entered into a Transition Services Agreement, dated as of June 11, 2008, which is referred to as the Transition Services Agreement, with Tony L. White. Under the Transition Services Agreement, for a period of five years from the effective time of the merger, which we refer to as the Service Period, Mr. White has agreed to perform certain consulting services on behalf of ABI. In connection with this arrangement, ABI will provide Mr. White with the services of an administrative assistant and the use of ABI office equipment during the Service Period and will reimburse Mr. White for reasonable business expenses. ABI will also reimburse Mr. White for certain financial advisory fees incurred by Mr. White until the first anniversary of the effective time of the merger.

Table of Contents

Indemnification of Directors and Officers

Under the terms of the merger agreement, Invitrogen has agreed that all rights to exculpation and indemnification, including rights to the advancement of expenses, for acts occurring at or prior to the merger, in ABI's certificate of incorporation or by-laws, or in any indemnification agreement, in favor of current or former directors, officers, or employees of ABI will survive for a period of six years following the merger. The merger agreement also provides that for six years after the effective time of the merger, Invitrogen will maintain ABI's directors' and officers' liability insurance and fiduciary liability insurance (or substitute policies) on terms that are, in the aggregate, no less advantageous to the insured with respect to claims arising from facts or events that occurred on or before the effective time of the merger. Invitrogen, however, will not be required to expend more than an amount per year equal to 250% of the annual premium paid by ABI for such insurance for the fiscal year ended June 30, 2008. If Invitrogen would be required to expend more than 250% of such annual premium, it will be required to obtain the maximum amount of insurance available for such annual premium amount.

Financing Commitments

In connection with the proposed merger, on June 11, 2008, Invitrogen entered into a financing commitment letter, or the Commitment Letter, with Bank of America, BAS, UBS Finance, UBS and MSSF. Bank of America, BAS, UBS Finance, UBS and MSSF, are herein referred to as the Commitment Parties. Subject to the terms and conditions of the Commitment Letter, Bank of America has committed to provide to Invitrogen, severally but not jointly, 50% of the principal amount of each of the Credit Facilities and to act as the administrative agent, UBS Finance has committed to provide to Invitrogen, severally but not jointly, 30% of the principal amount of each of the Credit Facilities, and MSSF has committed to provide to Invitrogen, severally but not jointly, 20% of the principal amount of each of the Credit Facilities.

The Credit Facilities contemplated by the Commitment Letter consist of: (1) a revolving credit facility of \$250 million, or the Revolving Facility; (2) a term loan A facility in an amount of \$1.5 billion, or the Term A Facility; and (3) a term loan B facility of \$900 million, or the Term B Facility, and together with the Term A Facility, the Term Facilities. At Invitrogen's option, up to \$400 million of the Term Facilities may be made available in a Euro-denominated tranche or tranches, with a European subsidiary of Invitrogen acting as the borrower (the European Borrower).

Subject to the terms and conditions of the Commitment Letter, Bank of America, UBS Finance and MSSF will act as the initial lenders for the Credit Facilities and BAS, UBS and MSSF have agreed to act as the lead arrangers for the Credit Facilities.

The proceeds of loans under the Credit Facilities, together with cash on hand at Invitrogen, ABI and their respective subsidiaries, and the issuance of common stock of Invitrogen at the closing of the merger, are intended to finance (1) the merger of ABI with and into Atom Acquisition pursuant to the merger agreement, (2) costs and expenses related to the transaction, (3) the repayment of, and termination of all commitments to make extensions of credit under, certain existing indebtedness of Invitrogen and ABI, other than Invitrogen's existing convertible notes and other exceptions, and (4) the ongoing working capital and general corporate purposes of the combined company after giving effect to the merger.

The Commitment Letter provides that the principal of the loans under the Term A Facility will amortize quarterly, based upon the annual percentages of the original stated principal amount of the loans under the Term A Facility loans set forth below, with the final payment of all amounts outstanding under the Term A Facility, plus accrued interest, due five years after the date the Credit Facilities are funded.

Table of Contents

Term A Facility Percentage of Stated Principal

| | |
|-------------|-----|
| Loan year 1 | 5% |
| Loan year 2 | 10% |
| Loan year 3 | 10% |
| Loan year 4 | 15% |
| Loan year 5 | 60% |

The Commitment Letter provides that the principal of the loans under the Term B Facility will amortize quarterly, in equal installments equal to one-quarter of 1% of the original stated principal amount of the loans under the Term B Facility, with the final payment of all amounts outstanding under the Term B Facility, plus accrued interest, due seven years after the date the Credit Facilities are funded. The Revolving Facility will terminate and all amounts outstanding thereunder, plus accrued interest, will be due five years after the date the Credit Facilities are funded.

It is expected that loans under the Credit Facilities will bear interest at rates based on LIBOR (subject, in the case of the Term B Facility, to a LIBOR floor of 3.00% for the first three years following the closing date) plus a margin, the Applicable Margin, or, at the option of Invitrogen, the Base Rate (to be defined as the higher of (x) the Bank of America prime rate and (y) the Federal Funds rate plus 0.50%) plus the Applicable Margin. It is expected that:

the initial Applicable Margin will be, with respect to the Term A Facility and the Revolving Facility, 2.50% per annum, in the case of LIBOR advances, and 1.50% per annum, in the case of Base Rate advances; and

the Applicable Margin with respect to the Term B Facility will be 3.00% per annum, in the case of LIBOR advances, and 2.00% per annum, in the case of Base Rate advances.

Following the delivery of Invitrogen's financial statements for the first full fiscal quarter ending after the closing date of the merger, the Applicable Margin for the Term A Facility and the Revolving Facility will be determined in accordance with a leverage-based pricing grid. Swingline loans under the Revolving Facility will bear interest at the Base Rate plus the Applicable Margin.

It is expected that loans under the Credit Facilities will be required to be prepaid with a portion of the net cash proceeds of non-ordinary course sales or other dispositions of property and assets and casualty proceeds, condemnation awards and certain other extraordinary receipts, subject to exceptions, including for sales of inventory in the ordinary course of business and a basket for share buy-backs, and reinvestment provisions. The portion of such net cash proceeds to be applied will be determined based on Invitrogen's leverage ratio, with:

100% to be applied if the leverage ratio is greater than or equal to 3.0x;

50% if the leverage ratio is less than 3.0x and greater than or equal to 2.5x; and

0% if the leverage ratio is less than 2.5x.

Loans under the Credit Facilities will also be required to be prepaid with 100% of the net cash proceeds from the issuance or incurrence by Invitrogen or its subsidiaries after the closing date of debt (other than permitted debt). These mandatory prepayments will be applied to the ratable repayment of each of the Term Facilities; provided that any lender under the Term B Facility may decline to accept any such prepayment, in which case any declined amount will be applied ratably to prepay the term loans of the non-declining lenders under the Term Facilities.

Invitrogen's obligations under the Credit Facilities are expected to be guaranteed by each existing and future direct and indirect domestic subsidiary of Invitrogen, or the U.S. Guarantors. The obligations of the European Borrower, if any, will be guaranteed by Invitrogen and its direct and indirect domestic and foreign subsidiaries, or the Foreign Guarantors, subject to certain exceptions. Invitrogen's obligations under the

Credit Facilities are

Table of Contents

expected to be secured by substantially all of the assets of Invitrogen and the U.S. Guarantors. The obligations of the European Borrower under the Credit Facilities, if any, are expected to be secured by substantially all of the assets of Invitrogen, the U.S. Guarantors, the European Borrower and the Foreign Guarantors, subject to certain exceptions.

The Commitment Letter provides that the Credit Facilities will include financial covenants, including a maximum leverage ratio and minimum fixed charge coverage ratio. The Credit Facilities are also expected to contain customary affirmative and negative covenants, subject to materiality and other qualifications, baskets and exceptions usual and customary for facilities and transactions of this type. The negative covenants are expected to limit, among other things:

liens;

indebtedness (including guarantees or other contingent obligations);

investments (including loans and advances); provided that (a) if the leverage ratio is less than 3.0x, permitted acquisitions may be made without limit and (b) if the leverage ratio is equal to or greater than 3.0x, permitted acquisitions will be permitted in an amount which, when aggregated with share buy-backs, shall not exceed \$500,000,000 per year;

mergers and other fundamental changes;

sales and other dispositions of property or assets;

payments of dividends and other distributions; provided that (a) if the leverage ratio is less than 3.0x, such payments and distributions may be made without limit and (b) if the leverage ratio is equal to or greater than 3.0x, share buy-backs will be permitted in an amount which, when aggregated with permitted investments, shall not exceed \$500,000,000 per year;

changes in the nature of business;

transactions with affiliates;

burdensome agreements;

use of proceeds;

capital expenditures;

amendments of organizational documents;

changes in accounting policies or reporting practices;

prepayments of other indebtedness;

modification or termination of documents related to the merger or certain indebtedness;

sale/leaseback transactions;

granting negative pledges;

operating leases;

foreign operations; and

impairment of security interests.

The Credit Facilities are also expected to contain customary events of default.

The Commitment Parties' commitments to fund the Credit Facilities under the Commitment Letter are subject to conditions precedent, including: (1) accuracy and completeness of representations made by Invitrogen to the Commitment Parties and (2) absence of any offering, placement or arrangement of any debt securities or

Table of Contents

bank financings by or on behalf of Invitrogen or ABI other than certain exceptions. In addition, the initial extension of credit under the credit documentation is subject to conditions precedent, including: (1) satisfaction of the conditions to closing of the merger as set forth in the merger agreement; (2) the execution and delivery of definitive documentation with respect to the Credit Facilities; (3) perfection of the collateral agent's security interests in the certain of the collateral; (4) receipt by the lenders of customary opinions and other similar documents reasonably satisfactory to the lead arrangers, of counsel to Invitrogen and the guarantors; (5) receipt of all material governmental, shareholder and third party consents and approvals as necessary in connection with the Credit Facilities; (6) receipt by the lead arrangers of audited and unaudited consolidated financial statements of ABI and pro forma consolidated financial statements giving effect to the merger and financial forecasts prepared by management of Invitrogen and ABI; (7) a customary solvency certificate with respect to the companies on a consolidated basis; (8) consummation of the merger simultaneously with the funding under the Credit Facilities in accordance with the terms of the merger agreement; (9) absence of any material adverse change in the financial condition, business, operations or assets of ABI and its subsidiaries, taken as a whole, since the date of the Commitment Letter, subject to certain exceptions as specified in the merger agreement and (10) payment of all accrued and invoiced fees and expenses of the lead arrangers, the administrative agent and the lenders payable on the closing of the merger agreement shall have been paid.

Following the closing date, it is expected that the Credit Facilities will provide that Invitrogen will have the right to make no more than two requests in total to increase the aggregate commitments under the Revolving Facility and/or to increase the maximum principal amount of the Term A Facility and/or the Term B Facility, which increase can also be in the form of a new tranche of term loans, in an aggregate principal amount for all such requests of up to \$500 million, provided certain conditions are met.

The description of the Commitment Letter, and the Credit Facilities contemplated by the Commitment Letter, contained above is based upon the terms set forth in such letter which terms are subject to modification by the parties thereto, and further subject to negotiation and execution of the definitive credit agreement satisfactory to them, and the syndicate of financial institutions arranged by them. As a result, the final terms of the definitive credit agreement may vary from those described above. The Commitment Parties' commitments under the Commitment Letter will expire at the earliest of (1) the outside date set forth in the merger agreement, (2) June 11, 2009, unless the closing of the merger occurs on or prior thereto, (3) the closing of the merger without the use of the Credit Facilities, and (4) the termination of the merger agreement. Bank of America, BAS, UBS Finance, UBS and MSSF will receive compensation in connection with the Commitment Letter and the Credit Facilities.

Table of Contents

THE MERGER AGREEMENT

The following summary describes the material provisions of the merger agreement and the amendment to the merger agreement, which are included in this joint proxy statement/prospectus as Annexes A and B, respectively, and are incorporated by reference into this joint proxy statement/prospectus. The merger agreement and the amendment to the merger agreement are referred to collectively as the merger agreement. The provisions of the merger agreement are complicated and not easily summarized. This summary may not contain all of the information about the merger agreement that is important to you. You are encouraged to read the merger agreement carefully in its entirety.

The merger agreement is included in this joint proxy statement/prospectus in order to provide you with information regarding its terms. It is not in any way intended to provide you with factual information about the current state of affairs of either Invitrogen or ABI. Such information can be found elsewhere in this joint proxy statement/prospectus (including the attached annexes) and in the other public filings that Invitrogen and ABI make with the SEC, which are available without charge at <http://www.sec.gov>.

The merger agreement contains representations, warranties, covenants and other agreements, each as of specific dates. These representations, warranties, covenants and other agreements are qualified by information contained in confidential disclosure schedules that the parties exchanged in connection with the execution of the merger agreement. The disclosure schedules contain information that modifies, qualifies and creates exceptions to the representations, warranties, covenants and other agreements set forth in the merger agreement. Since some of the information contained in the disclosure schedules may be non-public, Invitrogen and ABI do not believe that this information is required to be publicly disclosed under the federal securities laws (although any specific material facts that qualify the representations and warranties in the merger agreement have been disclosed in this joint proxy statement/prospectus). Moreover, some of these representations, warranties, covenants and/or other agreements may not be accurate or complete as of a specific date because they are subject to a contractual standard of materiality that may be different from the standard generally applied under the federal securities laws and/or were used for the purpose of allocating risk between Invitrogen and ABI rather than establishing matters as facts. Finally, information concerning the subject matter of these representations, warranties, covenants and other agreements may have changed since the date of the merger agreement, which may or may not be fully reflected in Invitrogen's and ABI's public disclosures. Accordingly, you should not rely on these representations, warranties, covenants and other agreements as statements of fact.

Structure of the Merger

The Agreement and Plan of Merger, dated as of June 11, 2008, as amended by Amendment No. 1 thereto, dated as of September 9, 2008, by and among Invitrogen, Atom Acquisition, a wholly owned subsidiary of Invitrogen and ABI, or the merger agreement, provides for the merger of ABI with and into Atom Acquisition, with Atom Acquisition continuing as the surviving company. At the time of the merger, Invitrogen will (1) form a Delaware corporation, all of the outstanding shares of capital stock of which will be owned by Invitrogen and (2) immediately prior to the effective time of the merger, merge such subsidiary with and into Invitrogen pursuant to Section 253 of the DGCL, with Invitrogen continuing as the surviving corporation, for the sole purpose of changing the name of Invitrogen to Applied Biosystems Inc.

Completion and Effectiveness of the Merger

The closing of the merger will occur as soon as possible but no later than the second business day after the date upon which all of the conditions to completion of the merger contained in the merger agreement (other than those conditions that are waived or by their nature are to be satisfied at the closing of the merger) are satisfied or at such other date as Invitrogen and ABI may agree (see Conditions to Completion of the Merger). The merger will become effective upon the filing of the certificate of merger with the Secretary of State of the State of Delaware or at such later time as may be agreed upon by Invitrogen and ABI and specified in such certificate of merger.

Table of Contents

The proposed transaction is currently expected to close in the fall of 2008; however, because completion of the merger is subject to a number of conditions, Invitrogen and ABI cannot predict the actual timing.

Merger Consideration

Conversion of Shares

The merger agreement provides that at the effective time of the merger, each share of Applied Biosystems stock issued and outstanding immediately prior to the effective time of the merger will be converted into the right to receive either a number of shares of Invitrogen common stock, an amount of cash, or a combination of Invitrogen common stock and cash, in each case as described below. Applied Biosystems stockholders will have the right to elect to receive cash, Invitrogen common stock, or a combination of Invitrogen common stock and cash, with respect to each share of Applied Biosystems stock they hold, subject in each case to the adjustment and allocation procedures described below under Election Procedures; Allocation of Merger Consideration Allocation of Merger Consideration. In the following discussion, the number of shares of Invitrogen common stock to be received for each share of Applied Biosystems stock being converted into Invitrogen common stock is referred to as the stock consideration, and the amount of cash to be received for each share of Applied Biosystems stock being converted into cash is referred to as the cash consideration.

Pursuant to the merger agreement and assuming merger consideration of \$38.00 in value for each share of Applied Biosystems stock, Invitrogen will issue approximately 80 million shares of Invitrogen common stock and will pay between \$3.0 billion and \$3.2 billion in cash. The total number of shares of Invitrogen common stock constituting the stock consideration and the total amount of cash consideration will not change from what was agreed to in the merger agreement (other than for adjustment in the event that there is any change in the outstanding shares of capital stock of Invitrogen or Applied Biosystems as a result of any reclassification, recapitalization, stock split (including a reverse stock split) or combination, exchange or readjustment of shares, or any stock dividend or stock distribution) and as described below under Adjustment Based on Price of Invitrogen Shares. However, since the market price of Invitrogen common stock will fluctuate, the total value of the stock consideration and therefore the value of the total merger consideration may increase or decrease between the date of the merger agreement and the effective time of the merger. Accordingly, the value of the actual per share consideration to be paid to Applied Biosystems stockholders cannot be determined until after the effective time of the merger.

Mixed Consideration

The merger agreement provides that each share of Applied Biosystems stock with respect to which a stockholder makes an election to receive the mixed consideration, and each share for which a holder fails to make any election with respect to any Applied Biosystems stock, will be converted into the right to receive the combination of (x) \$17.10 in cash, or the per share cash amount, and (y) 0.4543 of a share of Invitrogen common stock.

Cash Consideration

The merger agreement provides that each share of Applied Biosystems stock with respect to which a stockholder makes an election to receive cash, or a cash electing share, will be converted into the right to receive \$38.00 in cash without interest, or the per share cash election consideration.

Notwithstanding anything contained in the preceding sentence to the contrary, if:

the product of the number of cash electing shares and the per share cash election consideration, such product being the cash election amount, exceeds

the difference between (1) the product of the per share cash amount and the total number of shares of Applied Biosystems stock (other than the shares of Applied Biosystems stock that are issued and held

Table of Contents

by ABI or its subsidiaries) issued and outstanding immediately prior to the effective time of the merger minus (2) the product of the number of mixed consideration electing shares and the per share cash amount, or the available cash election amount, then each cash electing share will be converted into a right to receive:

an amount of cash, without interest, equal to the product of the per share cash election consideration and a fraction, the numerator of which will be the available cash election amount and the denominator of which will be the cash election amount, or the cash fraction, and

a number of shares of Invitrogen common stock equal to the product of

0.8261 and

one minus the cash fraction.

Stock Consideration

The merger agreement provides that an Applied Biosystems stockholder who makes a valid election to receive stock consideration, or a stock election, will have the right to receive, in exchange for each share of Applied Biosystems stock held by such holder for which such a stock election is made, 0.8261 shares of Invitrogen common stock. Sometimes such shares are referred to as stock election shares. However, if the available cash election amount exceeds the cash election amount, then each stock election share will be converted into the right to receive (1) an amount of cash (without interest) equal to the amount of such excess divided by the number of stock electing shares and (2) a number of shares of Invitrogen common stock equal to the product of (x) 0.8261 and (y) a fraction, the numerator of which will be the per share cash election consideration minus the amount calculated in clause (1) of this paragraph and the denominator of which will be the per share cash election consideration.

Adjustment Based on Price of Invitrogen Shares

If the arithmetic average of the volume-weighted average price of Invitrogen common stock on each trading day during the 20 consecutive trading days immediately preceding the third business day prior to the effective time of the merger, or the 20-day VWAP of Invitrogen common stock, is less than \$46.00 per share, the holder of each share of Applied Biosystems stock which is converted into a right to receive any portion of the merger consideration in the form of shares of Invitrogen common stock will, in addition, receive an amount in cash without interest equal to the product of (x) the portion of a share of Invitrogen common stock which such holder has a right to receive multiplied by (y) the lesser of (A) \$46.00 minus the 20-day VWAP of Invitrogen common stock and (B) \$2.31. However, if the 20-day VWAP of Invitrogen common stock is less than \$43.69 per share, there will not be any cash paid in addition to the amount calculated as described above. There also will not be any adjustment in the merger consideration if the 20-day VWAP of Invitrogen common stock exceeds \$46.00 per share. Applied Biosystems stockholders who receive cash only, or \$38.00 per share, will not receive any additional amounts.

Dissenting Shares

In certain circumstances, holders of Applied Biosystems stock who have not voted in favor of or consented to the merger and have otherwise complied with the provisions of Section 262 of the DGCL as to appraisal rights, if any, will be entitled to such rights as are granted by Section 262 of the DGCL. If any holder of such dissenting shares waives, withdraws or loses the right to appraisal under Section 262 of the DGCL or the court properly determines that such holder is not entitled to relief under Section 262 of the DGCL, then each dissenting share will be deemed to have been converted into the right to receive the mixed merger consideration in the manner provided in Election Procedures; Allocation of Merger Consideration Election Procedures. For a description of the Allocation of Merger Consideration between cash and stock, see Election Procedures;

Table of Contents

Allocation of Merger Consideration Allocation of Merger Consideration. For more information regarding appraisal rights, please see The Merger Appraisal Rights. If any holder of dissenting shares fails to perfect or otherwise waives, withdraws or otherwise loses the right of appraisal under Section 262 of the DGCL or a court of competent jurisdiction determines that a holder is not entitled to the rights provided by Section 262 of the DGCL then such dissenting shares will be treated as mixed consideration electing shares.

ABI is required to give Invitrogen prompt notice of any written demands for appraisal of Applied Biosystems stock and Invitrogen shall have the right to direct and participate in all negotiations and proceedings with respect to demands for appraisal under the DGCL. Prior to the effective time, ABI will not, without the prior written consent of Invitrogen, voluntarily make any payment with respect to demands for appraisal rights, settle or offer to settle any such demands or agree to do any of the foregoing. Any amount payable to a holder of dissenting shares exercising appraisal rights will be paid in accordance with the DGCL.

Election Procedures; Allocation of Merger Consideration

Election Procedures

The election form and other appropriate and customary transmittal materials are being mailed to Applied Biosystems stockholders separately.

The election form will allow each Applied Biosystems stockholder to specify the number of shares of Applied Biosystems stock with respect to which such holder elects to receive stock consideration, cash consideration or mixed consideration. The election must be made prior to the election deadline. The election deadline will be 5:00 p.m., New York city time, on either the date of the Applied Biosystems special meeting of stockholders or, if the closing date of the merger is more than four business days following the Applied Biosystems special meeting of stockholders, two business days before the closing date of the merger. Invitrogen and ABI will publicly announce the anticipated election deadline at least five business days before the anticipated closing date of the merger.

To make a valid election, each Applied Biosystems stockholder must submit a properly completed form of election so that it is actually received by the exchange agent at or prior to the election deadline. A form of election will be properly completed only if accompanied by certificates which represent such stockholders' shares of Applied Biosystems stock covered by the election form (or customary affidavits and indemnification regarding the loss or destruction of such certificates or the guaranteed delivery of such certificates) or, in case of book-entry shares, any additional documents specified by the procedures set forth in the election form.

If an Applied Biosystems stockholder does not make an election to receive cash consideration, stock consideration or mixed consideration pursuant to the merger, the election is not received by the exchange agent by the election deadline, the forms of election are improperly completed and/or are not signed, or the certificates representing Applied Biosystems stock are not included with the election form, such stockholder will be deemed not to have made an election. Stockholders not making an election will be deemed to have elected to receive mixed consideration with respect to those shares for which they made no election.

For example, assuming an Applied Biosystems stockholder holds 100 shares of Applied Biosystems stock (and that the final Invitrogen stock price is \$46.00), if such stockholder made:

an all cash election, such holder would receive approximately \$3,800 in cash;

an all stock election, such holder would receive 82.61 shares of Invitrogen common stock; and

an election for a combination of cash and stock, such holder would receive \$1,710 in cash and 45.43 shares of Invitrogen common stock for each stock.

The actual allocation of cash and stock is subject, in each case, to the allocation procedures set forth in the merger agreement. Under these procedures, an Applied Biosystems stockholder who makes an all cash election

Table of Contents

will not receive all cash if the cash election pool is oversubscribed, and an Applied Biosystems stockholder who makes an all stock election will not receive all stock if the stock election pool is oversubscribed. For more information regarding these allocation procedures, see Election Procedures; Allocation of Merger Consideration Allocation of Merger Consideration.

Any election form may be revoked or changed by a stockholder submitting such election form prior to the election deadline. If cash election or stock election is so revoked, the shares of Applied Biosystems stock represented by such election form will be treated as mixed consideration electing shares unless such stockholder properly makes a subsequent election. Invitrogen will not return the Applied Biosystems stock certificates to the revoking stockholder unless such stockholder so requests. The exchange agent will generally have discretion to determine, in its good faith, whether any election, revocation or change has been properly or timely made and to disregard immaterial defects in the election forms. None of Invitrogen, Atom Acquisition or the exchange agent will have obligation to notify stockholders of any defect in an election form.

Allocation of Merger Consideration

The aggregate amount of cash and the aggregate number of shares of Invitrogen common stock to be paid and issued, respectively, to Applied Biosystems stockholders pursuant to the merger are fixed (in each case subject to adjustment in the event that there is any change in the outstanding shares of capital stock of Invitrogen or Applied Biosystems as a result of any reclassification, recapitalization, stock split (including a reverse stock split) or combination, exchange or readjustment of shares, or any stock dividend or stock distribution with a record date between June 11, 2008, and the effective time of the merger). The total cash amount that will be paid as the merger consideration is determined by multiplying \$17.10 and the number of shares of Applied Biosystems stock outstanding. If the elections of all of the Applied Biosystems stockholders result in an oversubscription or undersubscription of the available cash amount, the aggregate amount of cash or Invitrogen common stock, as applicable, will not be increased. Rather, the exchange agent will allocate between cash and Invitrogen common stock in the manner described above. If the 20-day VWAP of Invitrogen common stock is less than \$46.00 per share, then holders of Applied Biosystems stock who receive all or a portion of their consideration in shares of Invitrogen stock will also receive an additional cash amount of up to \$1.05 per share of Applied Biosystems stock if such holder elects mixed consideration, or up to \$1.91 per share of Applied Biosystems stock if such holder elects stock consideration. Accordingly, there is no assurance that an Applied Biosystems stockholder that has made a valid election to receive the cash consideration, the stock consideration or a combination of cash and stock in respect of their shares of Applied Biosystems stock will receive the form or combination of consideration elected with respect to the shares of Applied Biosystems stock held by such stockholder. See Risk Factors Applied Biosystems stockholders may receive a form or combination of consideration different from what they elect.

Exchange of Applied Biosystems Stock Certificates for Invitrogen Stock Certificates

Invitrogen has retained American Stock Transfer & Trust Company as the exchange agent for the merger to handle the exchange of shares of Applied Biosystems stock for the merger consideration, including the payment of the cash portion of the merger consideration and the payment of cash for fractional shares.

Only those holders of Applied Biosystems stock who properly surrender their Applied Biosystems stock certificates in accordance with the exchange agent's instructions will receive:

a statement indicating book-entry ownership of Invitrogen common stock or, if requested, a certificate representing Invitrogen common stock;

the merger consideration; and

cash in lieu of any fractional share of Invitrogen common stock.

After the effective time of the merger, each certificate representing shares of Applied Biosystems stock that has not been surrendered will represent only the right to receive upon surrender of that certificate, each of the

Table of Contents

items listed in the preceding sentence. Following completion of the merger, ABI will not register any transfers of Applied Biosystems stock outstanding on its stock transfer books prior to the merger.

To effect the exchange of shares of Applied Biosystems stock, the exchange agent will take the actions described below.

Applied Biosystems Stock - General

As soon as reasonably practicable after the effective time of the merger, and in any event not later than the second business day following the effective time of the merger, the exchange agent will mail to each record holder of shares of Applied Biosystems stock, who have not previously submitted an election form and properly surrendered their shares of Applied Biosystems stock to the exchange agent, a letter of transmittal (which will specify that the delivery will be effected, and risk of loss and title will pass, only upon proper delivery of such holder's certificates representing shares of Applied Biosystems stock) and instructions for surrendering the certificates representing shares of Applied Biosystems stock (or effective affidavits of loss in lieu thereof) or book-entry shares in exchange for the merger consideration. Upon surrender of certificates representing shares of Applied Biosystems stock (or effective affidavits of loss in lieu thereof) or book-entry shares, together with an executed letter of transmittal, to the exchange agent, the holder of those certificates will be entitled to receive the merger consideration in the form of Mixed Consideration only. The surrendered certificates representing Applied Biosystems stock will be cancelled.

Fractional Shares

Invitrogen will not issue fractional shares of Invitrogen common stock in the merger. Instead, each holder of shares of Applied Biosystems stock who would otherwise be entitled to receive fractional shares of Invitrogen common stock in the merger will be entitled to an amount of cash, if any, equal to the product obtained by multiplying the fractional share interest to which such holder would otherwise be entitled by the closing price for a share of Invitrogen common stock as reported on the NASDAQ Global Select Market on the day of the effective time of the merger. To the extent that the exchange agent shall sell shares of Invitrogen common stock in order to satisfy Invitrogen's obligation to pay cash in lieu of fractional shares, Invitrogen shall pay any commissions, transfer taxes and other out-of-pocket transaction costs in connection with such sale.

Termination of Exchange Fund

One year after the effective time of the merger, Invitrogen may require the exchange agent to deliver to Invitrogen all cash and shares of Invitrogen common stock remaining in the exchange fund. Thereafter, Applied Biosystems stockholders must look only to Invitrogen for payment of the merger consideration on their shares of Applied Biosystems stock. Any cash or shares of Invitrogen common stock remaining unclaimed by holders of shares of Applied Biosystems stock immediately prior to such time as such amounts would otherwise escheat to or become property of any governmental authority will, to the extent permitted by applicable law, become the property of the surviving company.

Closing of Transfer Books

At the effective time of the merger, the stock transfer books of ABI will be closed, and there will be no further registration of transfers on the transfer books of the surviving company of Applied Biosystems stock which were outstanding immediately prior to the effective time of the merger. If, after the effective time of the merger, certificates or book-entry shares of Applied Biosystems stock are presented to the surviving company or the exchange agent for any reason, they will be cancelled and exchanged in accordance with the terms of the merger agreement.

No Liability

None of Invitrogen, ABI, Atom Acquisition, the exchange agent or the surviving company will be liable to any holder of a certificate representing shares of Applied Biosystems stock for any merger consideration delivered to a public official pursuant to any abandoned property laws.

Table of Contents

Investment of Exchange Fund

The exchange agent will invest all cash included in the exchange fund, as directed by Invitrogen. Any interest and other income resulting from such investments will be paid to Invitrogen.

Distributions with Respect to Unexchanged Shares

No dividends or other distributions with respect to Invitrogen common stock with a record date on or after the effective time of the merger, or that are payable to the holders of record thereof who become such on or after the effective time of the merger, will be paid to the holder of any unsurrendered certificate or book-entry shares of Applied Biosystems stock until such certificate or book-entry shares of Applied Biosystems stock are surrendered to the exchange agent. All such dividends, other distributions and cash in lieu of fractional shares of Invitrogen common stock which are to be paid in respect of the shares of Invitrogen common stock to be received upon surrender of the certificate or book-entry shares of Applied Biosystems stock will be paid by Invitrogen to the exchange agent and will be included in the exchange fund, in each case until the surrender of such certificate or book-entry shares of Applied Biosystems stock as provided in the merger agreement.

Lost Certificates

If any certificates representing shares of Applied Biosystems stock have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the holder claiming such certificate to be lost, stolen or destroyed and, if required by Invitrogen or ABI, the posting by such person of a bond, in such reasonable amount as ABI may direct, as indemnity against any claim that may be made against it with respect to such certificate, the exchange agent will issue in exchange for such lost, stolen or destroyed certificate the merger consideration to be paid in respect of the shares of Applied Biosystems stock represented by such certificate.

Treatment of Equity Awards

Stock Options

The merger agreement provides that at the effective time of the merger, each outstanding unexpired and unexercised option to purchase or acquire shares of Applied Biosystems stock, whether or not vested or subject to any performance condition that has not been satisfied, will vest and become fully exercisable converted into an option to purchase the number of shares of Invitrogen stock equal to the product of (1) the Stock Option Conversion Fraction (as defined below) multiplied by (2) the number of shares of Applied Biosystems stock which could have been obtained prior to the effective time of the merger upon the exercise of each such stock option (rounded down to the nearest whole share), at an exercise price per share (rounded up to the nearest cent) equal to the exercise price for each such share of Applied Biosystems stock subject to a stock option divided by the Stock Option Conversion Fraction. Stock Option Conversion Fraction means (1) if the 20-day VWAP is \$46.00 per share or greater, 0.8261 or (2) if the 20-day VWAP is less than \$46.00 per share, a fraction, (x) the numerator of which is \$38.00 and (y) the denominator of which is the greater of (A) \$43.69 and (B) the 20-day VWAP, in each case, subject to adjustment. The other terms of such options to purchase shares of Applied Biosystems stock will continue to apply in accordance with their terms, including pursuant to such preexisting terms and conditions, provided, however, that Invitrogen will treat each option to purchase shares of Applied Biosystems stock as fully vested and exercisable. Each option to purchase shares of Applied Biosystems stock so converted is referred to as an Invitrogen Exchange Option. In connection with the issuance of Invitrogen Exchange Options, Invitrogen will reserve for issuance the number of shares of Invitrogen common stock that will become subject to Invitrogen Exchange Options.

Invitrogen will file a registration statement on Form S-8 (or any other appropriate form that it is eligible to use) under the Securities Act on the closing date of the merger with respect to the shares of Invitrogen common stock subject to Invitrogen Exchange Options and will use its commercially reasonable efforts to cause such registration statement to remain effective until the exercise or expiration of the Invitrogen Exchange Options.

Table of Contents

The number of shares subject to any Invitrogen Exchange Option and the exercise price per share of such Invitrogen Exchange Option will be determined in a manner which would not result in the conversion of options to purchase Applied Biosystems stock into Invitrogen Exchange Options being treated as a new grant of stock options under Section 409A of the Internal Revenue Code, and ABI and Invitrogen will agree upon any adjustments to avoid such new grant of stock options.

Restricted Stock

Under the merger agreement, each restricted share of Applied Biosystems stock will vest in full immediately prior to the closing of the merger and be converted into the right to receive the mixed consideration of Invitrogen common stock and cash as described above in Conversion of Shares.

Restricted Stock Units

Under the merger agreement, each outstanding right to receive Applied Biosystems stock pursuant to a stock unit award which has not lapsed immediately prior to completion of the merger, whether or not subject to any performance condition that has not been satisfied, will become fully vested and settled in shares of Applied Biosystems stock that will be converted in the merger into the right to receive the mixed consideration of Invitrogen common stock and cash as described above in Conversion of Shares.

Stock Units

Immediately prior to the effective time of the merger, each outstanding right to receive shares of Applied Biosystems stock that is held by a director who will not become a director of Invitrogen will be settled in shares of Applied Biosystems stock, and all such shares of Applied Biosystems stock will be converted in the merger into the right to receive the stock consideration consisting of Invitrogen common stock.

Employee Stock Purchase Plans

Pursuant to the terms of the merger agreement, ABI will ensure that no offering periods under its 1999 Employee Stock Purchase Plan or sub-plans adopted under such plan for the benefit of employees outside the U.S., collectively referred to herein as ESPPs, commence prior to the effective time of the merger. If necessary, ABI will shorten the offering period under the ESPPs in effect, to ensure that such offering terminates immediately prior to the effective time of the merger. In the event that ABI is required to shorten an offering period under the ESPPs in accordance with the preceding sentence, ABI will permit participants in the ESPPs to exercise, effective as of immediately prior to the effective time of the merger, any purchase rights existing immediately prior to the effective time of the merger under the ESPPs to acquire shares of Applied Biosystems stock at the purchase price set forth in the ESPPs and refund to participants in the ESPPs the funds that remain in the participants' accounts after any such purchase. As of the effective time of the merger, all ESPPs will be terminated.

Representations and Warranties

The merger agreement contains representations and warranties made by each of the parties regarding aspects of their respective businesses, financial condition and structure, as well as other facts pertinent to the merger. Each of ABI, on the one hand, and Invitrogen and Atom Acquisition, on the other hand, has made representations and warranties to the other in the merger agreement with respect to the following subject matters:

qualification, organization, etc.;

capital stock;

corporate authority; no violation;

SEC Reports and Financial Statements;

Sarbanes-Oxley Compliance;

108

Table of Contents

undisclosed liabilities;

compliance with laws and permits;

environmental matters;

employee benefit plans;

absence of certain changes or events;

investigations and litigation;

absence of ownership of the other party's common stock;

intellectual property;

tax matters;

information supplied;

labor matters;

information technology;

opinion of such party's financial advisor(s);

recommendations of the board of directors of Invitrogen and ABI and required stockholder votes;

material contracts;

regulatory compliance;

product recalls;

brokerage and finders fees and expenses;

affiliate transactions;

insurance; and

inapplicability of Section 203 of the DGCL, which prohibits certain business combinations between a Delaware corporation and an interested stockholder, and other takeover statutes.

The merger agreement also contains additional representations and warranties of Invitrogen relating to its financing commitments.

Certain representations and warranties of the parties are qualified as to materiality or as to Material Adverse Effect. Material Adverse Effect, when used in reference to Invitrogen or ABI, means any effect, change, fact, event, occurrence, development or circumstance that (1) is or would reasonably be expected to result in a material adverse effect on or change in the financial condition, properties, business, results of operations, or net assets of ABI or Invitrogen and all of their subsidiaries, taken as a whole, as the case may be, or (2) would reasonably be expected to result in criminal sanctions or prohibit or materially restrict or impede the consummation of the transactions contemplated by merger agreement, including the merger. However, such effects, changes, facts, events, occurrences, developments or circumstances will not constitute, or be taken into effect in determining whether there has been a Material Adverse Effect if they are caused or result from:

general changes or developments in the industry in which such party operates; political instability, acts of terrorism or war; or any change affection the United States economy or the economy of any region in which such party or any of its subsidiaries conducts business that is material to the business of such party, in each case as has not had or would not reasonably be expected to have a materially disproportionate adverse impact on such party and its subsidiaries, taken as a whole, as compared to other persons;

Table of Contents

changes in the market price or trading volume of Invitrogen common stock or Applied Biosystems stock, as the case may be;

the failure, in and of itself, of Invitrogen or ABI, as the case may be, to meet any internal or published projections, forecasts or revenue or earnings predictions for any period ending on or after the date of the merger agreement;

the announcement of the execution of the merger agreement or the pendency of the consummation of the merger, including any termination of, reduction in or similar negative impact on relationships, contractual or otherwise, with any customer, suppliers, distributors, partners or employees of ABI or Invitrogen or any of their respective subsidiaries, as applicable;

changes in applicable law, rule or regulation or GAAP as has not had or would not reasonably be expected to have a materially disproportionate adverse impact on such party and its subsidiaries, taken as a whole, as compared to other persons; or

any claim, action, suit or proceeding alleging breach of fiduciary duty or other violation of applicable Law relating to the merger agreement or the transactions contemplated by the merger agreement.

Covenants and Agreements

Conduct of Business before Completion of the Merger

Restrictions on ABI's Interim Operations

ABI has agreed that, prior to the completion of the merger, except as may be required by applicable law, contemplated in connection with the Celera separation agreement or agreed to in writing by Invitrogen, which consent will not be unreasonably withheld, delayed or conditioned, or, as may be expressly required or permitted by the merger agreement, ABI will, and will cause each of its subsidiaries to:

conduct its business and operate its properties only in the ordinary course consistent with past practice;

use its commercially reasonable efforts to preserve substantially in intact its business organization and goodwill and keep available the services of its present officers, employees and consultants who are integral to the operation of its business as presently conducted and to preserve their present relationships with significant customers and suppliers and with other persons with whom it has significant business relations;

and it will not, nor will it permit any of its subsidiaries to:

except for the payment of regular quarterly cash dividends on its common stock in an amount not to exceed \$.043 per share and with record and payment dates consistent with past practice in timing, and except in the ordinary course of business consistent with past practice and in an amount not in excess of the amount paid for the most recent fiscal quarter, authorize or pay any dividends on or make any distribution with respect to its outstanding shares of capital stock (whether in cash, assets, stock or other securities of ABI or its subsidiaries); provided, however, that this limitation applies only to subsidiaries not wholly owned, and a wholly owned subsidiary is deemed to include any entity in which ABI or one of its subsidiaries owns substantially all of the equity securities of such subsidiary, notwithstanding that directors' qualifying shares may have been issued or de minimis amounts of securities may have been issued to one or more third parties for foreign law compliance purposes;

Edgar Filing: INVITROGEN CORP - Form S-4/A

purchase, redeem or otherwise acquire any shares of its capital stock or any rights, warrants or options to acquire any such shares, except as may be required in connection with the redemption of all of the issued and outstanding shares of the Celera group common stock pursuant to the Celera separation substantially in accordance with the Celera separation agreement, and other than as directed by a participant in any equity plan of ABI as permitted by the terms of such plan as in effect as of the date hereof (including an express or default election to use shares to cover tax liabilities);

Table of Contents

split, combine or reclassify any of its capital stock or issue or authorize or propose the issuance of any other securities in respect of, in lieu of or in substitution for, shares of its capital stock, except for any such transaction by a wholly owned subsidiary of ABI which remains a wholly owned subsidiary after consummation of such transaction;

except as required pursuant to existing written agreements or employee benefit plans in effect and disclosed to Invitrogen prior to execution of the merger agreement, or as otherwise required by law, (1) except in the ordinary course of business, consistent with past practice in timing and amount substantially proportionate to increases for other similarly situated employees, increase the compensation, severance or other benefits payable or to become payable to its directors, officers or employees, (2) grant any severance or termination pay to (other than in the ordinary course of business, consistent with past practice in timing and substantially proportionate amount), or enter into or amend any severance agreement or settle any employment claim, involving ABI or any of its subsidiaries, in each case by or with respect to any officer of ABI (as such term is defined in Rule 16a-1 under the Exchange Act), (3) enter into or amend any employment agreement with any director or officer of ABI or any of its subsidiaries (except to the extent necessary to replace a departing employee or as is customary practice in any foreign jurisdiction and except for employment agreements terminable on less than 30 days notice without penalty) provided that such agreements will not contain a change of control provision, or (4) establish, adopt, enter into or amend any collective bargaining agreement, plan, trust, fund, policy or arrangement for the benefit of any current or former directors, officers or employees or any of their beneficiaries, except, in each case, as would not result in a material increase in the cost of maintaining such collective bargaining agreement, plan, trust, fund, policy or arrangement; provided that ABI will be permitted (a) to pay amounts payable to participants in ABI's Incentive Compensation Program for fiscal year 2008, consistent with past practice in timing and structure and (b) to pay amounts due to holders of outstanding performance units under ABI's Performance Unit Bonus Plan in connection with the consummation of the merger;

enter into or make any loans to any of its officers, directors, employees, affiliates, agents or consultants (other than loans or advances in the ordinary course of business consistent with past practice) or make any change in its existing borrowing or lending arrangements for or on behalf of any of such persons, except as required by the terms of any benefit plan of ABI as in effect as of the date the merger agreement;

materially change accounting policies or procedures, or any of its methods of reporting income, deductions or other material items for income tax purposes, except as required by GAAP, SEC rule or policy or applicable law;

except in respect of the merger, or any mergers, consolidations or business combinations in the ordinary course of business among ABI's wholly owned subsidiaries and except as disclosed to Invitrogen by ABI to, authorize, propose or announce an intention to authorize or propose, or enter into or amend any agreements with respect to, any mergers, consolidations, joint ventures or business combinations or acquisitions of assets or securities (1) with a value or purchase price (inclusive of assumption or incurrence of long-term indebtedness incurred in connection therewith, including any current portion thereof) in the aggregate in excess of \$50 million in the case of all transactions collectively (which consideration may not be paid in equity securities of ABI which will include options, warrants or other rights to acquire equity securities and any debt securities or other obligations convertible or exchangeable for equity securities), or (2) which would reasonably be expected to have the legal or practical effect of delaying or preventing, or reducing the likelihood of consummation of the merger or the obtaining of any regulatory or other consent or approval contemplated by the merger agreement;

adopt any amendments to its certificate of incorporation or by-laws or similar organizational documents;

Table of Contents

issue, sell, pledge, dispose of or encumber, or authorize the issuance, sale, pledge, disposition or encumbrance of, any shares of its capital stock or other ownership interest in ABI or any of ABI's subsidiaries or any securities convertible into or exchangeable for any such shares or ownership interest, or any rights, warrants or options, including grants of options, shares of restricted stock, restricted stock unit awards, stock unit awards or other convertible securities for compensatory purposes, to acquire or with respect to any such shares of capital stock, ownership interest or convertible or exchangeable securities or take any action to cause to be exercisable any otherwise unexercisable option under any existing stock option plan (except as otherwise required by the express terms of any unexercisable options outstanding), other than (1) issuances of Applied Biosystems stock in respect of any exercise of stock options outstanding and disclosed in disclosure schedule provided to Invitrogen by ABI, (2) the sale of shares of Applied Biosystems stock pursuant to the exercise of options to purchase Applied Biosystems stock if necessary to effectuate an optionee direction upon exercise or for withholding, (3) issuances of rights to purchase shares of Applied Biosystems stock under the ESPPs, issuances of shares of Applied Biosystems stock upon exercise of rights under the ESPPs (including issuances of shares of Applied Biosystems stock pursuant to the ESPPs upon conversion of rights to purchase Celera common stock into rights to purchase Applied Biosystems stock in connection with the Celera separation) and upon settlement or payment of stock unit awards or restricted stock unit awards previously granted under ABI's equity plans or ABI's 1993 Director Stock Purchase and Deferred Compensation Plan, (4) grants of Applied Biosystems stock or stock unit awards to the directors of ABI upon their election or reelection to ABI's board of directors or otherwise in respect of compensation or deferred compensation, and the issuance to directors of options to purchase shares of Applied Biosystems stock and stock awards consistent with past practice, and (5) grants of options to newly hired employees of ABI, in an aggregate amount not to exceed 114,000 shares at a fair market value exercise price determined in accordance with the applicable ABI equity plan;

incur, assume, guarantee, prepay or otherwise become liable for any indebtedness for borrowed money (directly, contingently or otherwise), other than in the ordinary course of business consistent with past practice, except for (1) indebtedness for borrowed money incurred pursuant to the Credit Agreement, dated as of May 25, 2007, by and among ABI, the initial lenders named therein, Citigroup Global Markets Inc., as sole arranger, JP Morgan Chase Bank, N.A., as syndication agent, Bank of America, N.A. and ABN Amro Bank N.V., as co-documentation agents, and Citibank, N.A., as administrative agent, (2) indebtedness for borrowed money incurred pursuant to the Term Loan Agreement, dated as of August 27, 2007, by and among ABI, the initial lenders named therein, and Bank of America, N.A., as administrative agent, (3) guarantees by ABI of indebtedness for borrowed money of wholly owned subsidiaries of ABI, (4) interest rate swaps on customary commercial terms, consistent with past practices and (5) overdrafts and similar charges incurred in the ordinary course of business in connection with ABI's cash management system,

except as required by law, (1) make or change any material tax election or settle or compromise any material tax liability, claim or assessment or agree to an extension or waiver of the limitation period to any material tax claim or assessment or grant any power of attorney with respect to material taxes or enter into any closing agreement with respect to any material tax or surrender any right to claim a material tax refund or (2) change its fiscal year;

modify, amend, terminate or waive any rights under, or assign any right or claim under, any of its material contracts, or make any proposal with respect to any of the foregoing, in any material respect, other than in the ordinary course of business;

settle, compromise, dismiss, discharge or otherwise dispose of any litigation, investigation, arbitration or proceeding other than those that (1) do not involve the payment by ABI or its subsidiaries of monetary damages, in excess of \$10 million in the aggregate plus applicable

Table of Contents

reserves and any applicable insurance coverage and do not involve any material injunctive or other non-monetary relief or impose material restrictions on the business or operations of ABI or its subsidiaries, and (2) provide for a complete release of ABI and its subsidiaries of all claims and do not provide for any admission of liability by ABI or any of its subsidiaries;

make any capital expenditures involving aggregate expenditures greater than the aggregate amount budgeted for under ABI's 2008 capital expenditure plan or 2009 preliminary capital expenditure plan set forth on the disclosure schedules provided to Invitrogen;

adopt a plan of complete or partial liquidation, dissolution, merger, consolidation, restructuring, recapitalization or other reorganization of ABI or any of its subsidiaries or alter through merger, liquidation, reorganization or restructuring the corporate structure of any of its subsidiaries (other than the merger contemplated by the merger agreement and the Celera separation); or

agree, in writing or otherwise, to take any of the foregoing actions;

and ABI will not:

except as permitted by the merger agreement, approve or authorize any action to be submitted to the stockholders of ABI for approval that is intended, or would reasonably be expected, to prevent, impede, interfere with, delay, postpone or adversely affect the transactions contemplated by the merger agreement;

sell, lease, license, transfer, pledge, assign, exchange or swap, mortgage or otherwise encumber (including securitizations), abandon, cancel, dispose of or otherwise lose or impair, agree to undertake any of the foregoing, or subject to any lien or otherwise dispose of any portion of its properties or assets, including the capital stock of any of its subsidiaries or any registration or application for intellectual property owned by ABI involving an individual transaction value in excess of \$10 million (or \$20 million in the aggregate), other than in the ordinary course of business consistent with past practice and except (1) for sales, leases, licenses, transfers, mortgages or encumbrances of obsolete assets, (2) pursuant to existing agreements in effect prior to the execution of the merger agreement and (3) as may be required by applicable law or any governmental entity in order to permit or facilitate the consummation of the transactions contemplated by the merger agreement;

amend, or redeem the rights issued under, the Rights Agreement, dated April 28, 1999, and amended April 17, 2002, between ABI and EquiServe Trust Company, N.A., as successor in interest to Fleet National Bank, N.A. (f/k/a BankBoston, N.A.), as rights agent, or the ABI Rights Agreement, or otherwise take any action to exempt any person (other than Invitrogen or its subsidiaries) or any action taken by such person from the ABI Rights Agreement or any state takeover statute (including Section 203 of the DGCL) or similarly restrictive provisions of ABI's organizational documents, except as permitted by the merger agreement;

modify, amend, terminate or waive any provision of any agreement related to the Celera separation in the form delivered to Invitrogen to the extent that such modification, amendment, termination or waiver will (1) prohibit or impair in any material respect any current business practice of ABI or any of its subsidiaries (or, from and after the effective time of the merger, Invitrogen or any of its subsidiaries) or the conduct of business of ABI or any subsidiary of ABI (or, from and after the effective time of the merger, Invitrogen or any of its subsidiaries) as currently conducted, (2) restrict in any material respect the ability of ABI or any subsidiary of ABI (or, from and after the effective time of the merger, Invitrogen or any of its subsidiaries) from engaging in any business or competing with any other party or (3) impose any material payment obligations with respect to the operation of ABI, or any subsidiary of ABI (or, from and after the effective time of the merger, Invitrogen, or any of its subsidiaries) and will use its reasonable best efforts to effectuate the Celera separation as promptly as

practicable in accordance with the agreements set forth on the disclosure schedule provided to Invitrogen;

Table of Contents

at any time before the effective time of the merger, without complying fully with the notice and other requirements of the WARN Act and any similar foreign, state or local law relating to plant closings and layoffs, effectuate (1) a plant closing (as defined in the WARN Act or any similar foreign, state or local law) affecting any single site of employment or one or more facilities or operating units within any single site of employment of ABI or any of its subsidiaries; or (2) a mass layoff (as defined in the WARN Act or any similar foreign, state or local law) at any single site of employment or one or more facilities or operating units within any single site of employment of ABI or any of its subsidiaries. Neither ABI nor any of its subsidiaries will otherwise terminate or lay off employees in such numbers as to give rise to liability under any applicable laws respecting the payment of severance pay, separation pay, termination pay, pay in lieu of notice of termination, redundancy pay, or the payment of any other compensation, premium or penalty upon termination of employment, reduction of hours, or temporary or permanent layoffs. For purposes of the WARN Act and the merger agreement, the effective time of the merger is and will be the same as the effective date within the meaning of the WARN Act;

fail to comply, in all material respects, with any obligations required by the Council Directive 77/187, dated February 13, 1977, or the Acquired Rights Directive, and collective dismissal laws;

except as required by GAAP, SEC rule or policy or applicable law, revalue in any material respect any of its assets, including writing down the value of inventory in any material manner, or writing-off notes or accounts receivable in any material manner;

except as contemplated by the merger agreement, amend, alter or modify the terms of any currently outstanding rights, warrants or options to acquire or purchase any capital stock of, or ownership interest in, ABI, or any securities convertible into or exchangeable for such capital stock or ownership interest, except for the acceleration of the vesting and/or exercisability of outstanding options to acquire Celera common stock, restricted shares of Celera common stock or restricted stock unit awards with respect to Celera common stock or similar actions with respect to Celera Corporation equity compensation arrangements; or

agree, in writing or otherwise, to take any of the foregoing actions.

Restrictions on Invitrogen's Interim Operations

Invitrogen has agreed that, prior to the completion of the merger, except as may be required by applicable law, agreed to in writing by ABI, which consent will not be unreasonably withheld, delayed or conditioned, as may be expressly required or permitted by the merger agreement, Invitrogen will, and will cause each of its subsidiaries to:

conduct its business and operate its properties only in the ordinary course consistent with past practice; and

use its commercially reasonable efforts to preserve substantially intact its business organization and goodwill, to keep available the services of its present officers, employees and consultants who are integral to the operation of its business as presently conducted and to preserve their present relationships with significant customers and suppliers and with other persons with whom it has significant business relations;

and Invitrogen will not, nor will it permit any of its subsidiaries to:

in the case of any of its subsidiaries that is not wholly owned, except in the ordinary course of business consistent with past practice, authorize or pay any dividends on or make any distribution with respect to its outstanding shares of capital stock (whether in cash, assets, stock or other securities of Invitrogen or its subsidiaries);

Table of Contents

purchase, redeem or otherwise acquire any shares of its capital stock or any rights, warrants or options to acquire any such shares;

split, combine or reclassify any of its capital stock or issue or authorize or propose the issuance of any other securities in respect of, in lieu of or in substitution for, shares of its capital stock, except for any such transaction by a wholly-owned subsidiary of Invitrogen which remains a wholly-owned subsidiary after consummation of such transaction;

enter into or make any loans to any of its officers, directors, employees, affiliates, agents or consultants (other than loans or advances in the ordinary course of business consistent with past practice) or make any change in its existing borrowing or lending arrangements for or on behalf of any of such persons, except as required by the terms of any Invitrogen plan;

materially change accounting policies or procedures, or any of its methods of reporting income, deductions or other material items for income tax purposes, except as required by GAAP, SEC rule or policy or applicable law;

except in respect of the merger, or any mergers, consolidations or business combinations in the ordinary course of business among Invitrogen's wholly owned subsidiaries and except as disclosed to ABI by Invitrogen, authorize, propose or announce an intention to authorize or propose, or enter into or amend any agreements with respect to, any mergers, consolidations, joint ventures or business combinations or acquisitions of assets or securities (1) with a value or purchase price (inclusive of assumption or incurrence of long-term indebtedness incurred in connection therewith, including any current portion thereof) in the aggregate in excess of \$75 million in the case of all transactions collectively (which consideration may not be paid in equity securities of Invitrogen which will include options, warrants or other rights to acquire equity securities and any debt securities or other obligations convertible or exchangeable for equity securities), or (2) which would reasonably be expected to have the legal or practical effect of delaying or preventing, or reducing the likelihood of consummation of the merger or the obtaining of any regulatory or other consent or approval contemplated hereby;

adopt any amendments to its certificate of incorporation or by-laws or similar organizational documents;

issue, sell, pledge, dispose of or encumber, or authorize the issuance, sale, pledge, disposition or encumbrance of, any shares of its capital stock or other ownership interest in Invitrogen or any of its subsidiaries or any securities convertible into or exchangeable for any such shares or ownership interest, or any rights, warrants or options, including grants of options, shares of restricted stock, restricted stock unit awards, stock unit awards or other convertible securities for compensatory purposes, to acquire or with respect to any such shares of capital stock, ownership interest or convertible or exchangeable securities or take any action to cause to be exercisable any otherwise unexercisable option under any existing stock option plan (except as otherwise required by the express terms of any unexercisable options outstanding) (other than (1) issuances of Invitrogen common stock in respect of any exercise of stock options outstanding and disclosed to ABI by Invitrogen, (2) the sale of shares of Invitrogen common stock pursuant to the exercise of options to purchase Invitrogen common stock if necessary to effectuate an optionee direction upon exercise or for withholding, (3) issuance of shares of Invitrogen common stock under Invitrogen's employee stock purchase plan disclosed to ABI or upon settlement of stock unit awards or restricted stock unit awards granted under Invitrogen's equity plans; (4) grants of options, shares of restricted stock, restricted stock unit awards, stock unit awards or other compensatory equity grants, consistent with past practice but not to exceed 400,000; and (5) pursuant to the exercise of conversion rights available to the holders of Invitrogen's outstanding 3¹/₄% Convertible Senior Notes due 2025, 1¹/₂% Convertible Senior Notes due 2024 and 2% Convertible Senior Notes due 2023;

Table of Contents

incur, assume, guarantee, prepay or otherwise become liable for any indebtedness for borrowed money (directly, contingently or otherwise), other than in the ordinary course of business consistent with past practice and except for (1) indebtedness for borrowed money incurred pursuant to the Credit Agreement, dated as of January 6, 2006, among Invitrogen, Bank of America, N.A., as administrative agent, swing line lender, and letter of credit issuer, UBS Finance LLC, as syndication agent, DNB Nor Bank ASA and Union Bank of California, N.A., as co-documentation agents, the other lenders party thereto, and Bank of America Securities LLC and UBS Securities LLC, as joint lead arrangers and book managers, (2) indebtedness for borrowed money in replacement of or to refinance existing indebtedness for borrowed money, (3) guarantees by Invitrogen of indebtedness for borrowed money of wholly-owned subsidiaries of Invitrogen, which indebtedness is incurred in compliance with the merger agreement, (4) interest rate swaps on customary commercial terms, consistent with past practices and (5) overdrafts and similar charges incurred in the ordinary course of business in connection with Invitrogen's cash management system;

except as required by law, (1) make or change any material tax election or settle or compromise any material tax liability, claim or assessment or agree to an extension or waiver of the limitation period to any material tax claim or assessment or grant any power of attorney with respect to material taxes or enter into any closing agreement with respect to any material tax or surrender any right to claim a material tax refund or (2) change its fiscal year;

adopt a plan of complete or partial liquidation, dissolution, merger, consolidation, restructuring, recapitalization or other reorganization of Invitrogen or any of its subsidiaries or alter through merger, liquidation, reorganization or restructuring the corporate structure of any of its subsidiaries (other than the merger contemplated by the merger agreement); or

agree, in writing or otherwise, to take any of the foregoing actions;

and Invitrogen will not:

approve or authorize any action to be submitted to the stockholders of Invitrogen for approval that is intended or would reasonably be expected to, prevent, impede, interfere with, delay, postpone or adversely affect the transactions contemplated by the merger agreement;

sell, lease, license, transfer, pledge, assign, exchange or swap, mortgage or otherwise encumber (including securitizations), abandon, cancel, dispose of or otherwise lose or impair, agree to undertake any of the foregoing, or subject to any lien or otherwise dispose of any portion of its properties or assets, including the capital stock of any of its subsidiaries or any registration or application for intellectual property owned by Invitrogen, other than in the ordinary course of business consistent with past practice and involving an individual transaction value in excess of \$10 million (or \$20 million in the aggregate), except (1) for sales, leases, licenses, transfers, mortgages or encumbrances of obsolete assets, (2) pursuant to existing agreements in effect prior to the execution of the merger agreement, and (3) as may be required by applicable law or any governmental entity in order to permit or facilitate the consummation of the transactions contemplated by the merger agreement;

amend, or redeem the rights issued under, the Invitrogen Rights Agreement or otherwise take any action to exempt any person (other than ABI or its subsidiaries) or any action taken by such person from the Invitrogen Rights Agreement or any state takeover statute (including Section 203 of the DGCL) or similarly restrictive provisions of Invitrogen's organizational documents;

at any time within the 90-day period before the effective time of the merger, without complying fully with the notice and other requirements of the WARN Act and any similar foreign, state or local law relating to plant closings and layoffs, effectuate (1) a plant closing (as defined in the WARN Act) affecting any single site of employment or one or more facilities

or operating units

Table of Contents

within any single site of employment of Invitrogen or any of its subsidiaries; (2) a mass layoff (as defined in the WARN Act) at any single site of employment or one or more facilities or operating units within any single site of employment of Invitrogen or any of its subsidiaries; nor (3) will Invitrogen or any of its subsidiaries otherwise terminate or lay off employees in such numbers as to give rise to liability under any applicable Laws respecting the payment of severance pay, separation pay, termination pay, pay in lieu of notice of termination, redundancy pay, or the payment of any other compensation, premium or penalty upon termination of employment, reduction of hours, or temporary or permanent layoffs. For purposes of the WARN Act and the merger agreement, the effective time of the merger is and will be the same as the effective date within the meaning of the WARN Act;

except as required by GAAP, SEC rule or policy or applicable law, revalue in any material respect any of its assets, including writing down the value of inventory in any material manner, or writing-off notes or accounts receivable in any material manner;

except as contemplated by the merger agreement, amend, alter or modify the terms of any currently outstanding rights, warrants or options to acquire or purchase any capital stock of, or ownership interest in, Invitrogen, or any securities convertible into or exchangeable for such capital stock or ownership interest; or

agree, in writing or otherwise, to take any of the foregoing actions.

Tax-free Reorganization Treatment

Invitrogen and ABI intend the merger to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. Each party and its respective subsidiaries have agreed to use their commercially reasonable efforts to cause the merger to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. Invitrogen, ABI and their respective subsidiaries have agreed generally not to take any action that would prevent or impede the merger from qualifying as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. For a description of certain tax consequences of the merger, see Material U.S. Federal Income Tax Consequences.

Invitrogen and ABI have agreed to use their commercially reasonable efforts in order for Invitrogen to obtain from DLA Piper LLP (US), and for ABI to obtain from Skadden, Arps, Slate, Meagher & Flom LLP opinions dated as of the closing date of the merger that the merger will constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. If these opinions are not rendered, Invitrogen and ABI may not complete the merger unless both Invitrogen and ABI waive this condition to closing of the merger.

Access to Information; Confidentiality

Until the earlier of the effective time of the merger or the termination date of the merger agreement, and subject to applicable law and confidentiality and joint defense agreements between Invitrogen and ABI, Invitrogen and ABI are required to (1) give the other party, its officers, employees, accountants, consultants, legal counsel, financial advisors, agents and other representatives reasonable access during normal business hours, to the properties, contracts, commitments, books and records and any report, schedule or other document filed or received by it pursuant to the requirements of federal or state securities laws of such granting party and its subsidiaries (including, without limitation, tax returns and work papers of independent auditors) and (2) use all commercially reasonable efforts to furnish to the other party, its counsel, financial advisors, auditors and other authorized representatives such additional financial and operating data and other information as such persons may reasonably request (including furnishing to the other party such granting party's financial results in advance of filing any filings with the SEC containing such financial results).

However, neither Invitrogen nor ABI is required to afford such access if it would cause a violation of any agreement to which any of such parties is a party, would cause a risk, in the reasonable judgment of the disclosing party, of a loss of privilege to the disclosing party, or any of their subsidiaries or would constitute a violation of any applicable law.

Table of Contents

Invitrogen and ABI Prohibited from Soliciting Other Offers

The merger agreement provides that neither Invitrogen nor ABI will, nor may each of Invitrogen and ABI permit its subsidiaries, nor authorize or permit any of its officers, directors or employees or any investment banker, financial advisor, attorney, accountant or other representative retained by it or any of its subsidiaries to, directly or indirectly:

solicit or encourage (including by way of furnishing any information to any person) any inquiries with respect to, or the making, submission or announcement of, any alternative transaction proposal (as defined below);

engage in any negotiations concerning or furnish to any person any information with respect to any possible alternative transaction proposal;

withdraw or modify, or publicly propose to withdraw or modify, the recommendation of the board of directors of ABI in a manner adverse to Invitrogen;

approve, endorse or recommend, or publicly propose to approve or recommend, any alternative transaction (as defined below); or

enter into any letter of intent, agreement in principle or similar document or any contract, agreement or commitment (whether binding or not) contemplating or otherwise relating to any alternative transaction proposal.

ABI may, however, before the earlier of, the approval and adoption of the merger agreement and the transaction by the Applied Biosystems stockholders and the termination date of the merger agreement in accordance with its terms, in response to an acquisition proposal which constitutes a superior proposal (as defined below) or which its board of directors determines, in good faith, could reasonably likely to become a superior proposal (but only if and to the extent that (1) its board of directors concludes in good faith (after consultation with its financial advisors and outside legal advisors) that the failure to take such action would be inconsistent with its fiduciary duties under applicable law, and (2) ABI has given Invitrogen at least two business days prior written notice of its intention to take any of the following actions and of the identity of the person or group of persons making such alternative transaction proposal and a summary of the material terms and conditions of such alternative transaction proposal and if it will not have breached in any material respect any of the provisions of Section 5.4 of the merger agreement) (a) furnish nonpublic information to the third party making such alternative transaction proposal, if, and only if, prior to so furnishing such information, it receives from such third party an executed confidentiality agreement with confidentiality provisions no less favorable to it than the confidentiality agreement entered into by Invitrogen and ABI and (b) engage in discussions or negotiations with such third party with respect to the alternative transaction proposal.

Nothing in the merger agreement prevents Invitrogen, ABI or their respective boards of directors from complying with their disclosure requirements in compliance with the federal securities laws relating to tender offers.

An alternative transaction with respect to any party, means any of the following transactions:

any transaction or series of related transactions with one or more third persons involving:

(1) any purchase from such party or acquisition (whether by way of a merger, share exchange, consolidation, business combination, consolidation or similar transaction) by any person or group of persons (as defined under Section 13(d) of the Exchange Act and the rules and regulations thereunder) of more than a 25% interest in the total outstanding voting securities of such party or any of its subsidiaries or any tender offer or exchange offer that if consummated would result in any person or group of persons beneficially owning 25% or more of the total outstanding voting securities of such party or any of its subsidiaries or any merger, consolidation, business combination or similar transaction involving such party or any of its subsidiaries, or

Table of Contents

(2) any sale, lease exchange, transfer, license, acquisition or disposition of more than 25% of the fair market value of the assets, net income, net revenues or cash flows of such party and its subsidiaries, taken as a whole, immediately prior to such transaction;

any liquidation or dissolution of such party; or

any combination of the foregoing.

An alternative transaction proposal means any offer, inquiry, proposal or indication of interest (whether binding or non-binding) to any person or its stockholders relating to an alternative transaction.

A superior proposal means an unsolicited, bona fide written alternative transaction proposal made by a third person to acquire, directly or indirectly, pursuant to a tender offer, exchange offer, merger, consolidation or other business combination or acquisition transaction, (1) all or substantially all of the assets of ABI or (2) over 50% of the outstanding voting securities of ABI and as a result of which Applied Biosystems stockholders immediately preceding such transaction would hold less than 50% of the aggregate equity interests in the surviving or resulting entity of such transaction (or its ultimate parent), which ABI's board of directors has in good faith determined (taking into account, among other things, (a) its consultation with its financial advisors and outside legal advisors, and (b) all terms and conditions of such alternative transaction proposal and the merger agreement (as it may be proposed to be amended by Invitrogen) to be more favorable, from a financial point of view, to the Applied Biosystems stockholders (in their capacities as stockholders), than the terms of the merger agreement (as it may be proposed to be amended by Invitrogen) and to be reasonably capable in feasibility and certainty of being consummated on the terms proposed, taking into account all legal, financial (including the financing terms of any such proposal), regulatory and other aspects of such alternative transaction proposal (including conditions to consummation).

Each of Invitrogen and ABI is required to as promptly as practicable (and in any event within two business days) provide the other party with oral and written notice of any request for information or any inquiries, proposals or offers relating to an alternative transaction proposal indicating, in connection with such notice, the name of such person making such request, inquiry, proposal or offer and the material terms and conditions of any proposals or offers and it must provide to the other party written notice of any such inquiry, proposal or offer within forty-eight hours of such event and copies of any written or electronic correspondence to or from any person making an acquisition proposal. Each of Invitrogen and ABI is required to keep the other party informed orally on a current basis of the status of any acquisition proposal, including with respect to the status and terms of any such proposal or offer and whether any such proposal or offer has been withdrawn or rejected and such party is required to provide to the other party written notice of any such developments (including copies of any written proposals or requests for information) within forty-eight hours. Each of Invitrogen and ABI is required to also provide any information to the other party (not previously provided to the other party) that it is providing to another person pursuant to the obligations described in this paragraph at substantially the same time it provides such information to such other person.

Recommendations of the Board of Directors

Invitrogen's board of directors has agreed to recommend to its stockholders the approval of the issuance of the shares of Invitrogen common stock in the merger, and to take all lawful action to solicit such approval. ABI's board of directors has agreed to recommend to its stockholders the approval and adoption of the merger agreement and the transaction, and to take all lawful action to solicit such approval.

ABI's board of directors, may withdraw or modify, or publicly propose to withdraw or modify, in a manner adverse to Invitrogen its recommendation to Applied Biosystems stockholders only in the event that it determines in good faith, after consultation with its financial advisors and outside legal advisors, that the failure to do so would be inconsistent with its fiduciary duties under applicable law. The boards of directors of Invitrogen and ABI may not recommend any acquisition proposal (other than the merger agreement and the transactions

Table of Contents

contemplated by the merger agreement, including the merger), except as specifically contemplated by, and in accordance with the restrictions and obligations described above under Invitrogen and ABI Prohibited from Soliciting Other Offers.

In addition, the merger agreement provides that, at any time prior to, but not after Applied Biosystems stockholders approval and adoption of the merger agreement and the merger, ABI, or its respective board of directors, may approve, endorse or recommend, or publicly propose to approve or recommend, an unsolicited bona fide written alternative transaction proposal to its stockholders, if:

its board of directors determines in good faith, after consultation with its financial advisers and outside legal advisers, that failing to do so would be inconsistent with its fiduciary duties under applicable law; and

prior to any such recommendation, (1) ABI will have given Invitrogen and Atom Acquisition prompt written notice advising them of (a) the decision of ABI's board of directors to take such action and the reasons therefor and (b) in the event the decision relates to an alternative transaction proposal, a summary of the material terms and conditions of the alternative transaction proposal and other information requested to be provided with respect thereto, (2) ABI will have given Invitrogen and Atom Acquisition, three business days, the notice period, after delivery of each such notice to propose revisions to the terms of the merger agreement (or make another proposal) and, during the notice period, ABI will, and will direct its financial advisers and outside legal advisers to, negotiate with Invitrogen in good faith (to the extent Invitrogen desires to negotiate) to make such adjustments in the terms and conditions of the merger agreement so that, if applicable, such alternative transaction proposal ceases to constitute (in the judgment of ABI's board of directors, after consultation with its financial advisers and outside legal advisers), a superior proposal or, if the recommendation does not involve an alternative transaction proposal, to make such adjustments in the terms and conditions of the merger agreement so that such change in recommendation is otherwise not necessary; and (3) ABI's board of directors will have determined in good faith, after considering the results of such negotiations and giving effect to the proposals made by Invitrogen and Atom Acquisition, if any, that such alternative transaction proposal, if applicable, continues to constitute a superior proposal or that such change in recommendation is otherwise still required.

Filings; Other Action

Each party to the merger agreement has agreed to use all reasonable best efforts (subject to, and in accordance with, applicable law) to promptly cooperate with the other party in doing all things necessary, proper or advisable under applicable laws and regulations to consummate and make effective the merger and the other transactions contemplated by the merger agreement, including (1) obtaining all necessary actions or nonactions, clearances, waivers, consents and approvals, including the approvals required from governmental entities and the making of all necessary registrations and filings and the taking of all steps as may be necessary to obtain an approval or waiver from, or to avoid an action or proceeding by, any governmental entity, (2) obtaining all necessary consents, approvals or waivers from third parties, (3) defending all lawsuits or other legal proceedings, whether judicial or administrative, challenging the merger agreement or the consummation of the transactions contemplated by the merger agreement and (4) executing and delivering all additional instruments necessary to consummate the transactions contemplated by the merger agreement.

Invitrogen and ABI were required to make pre-merger notification filings and to await the expiration or early termination of the statutory waiting period prior to completing the merger. The notifications required under the HSR Act to the FTC and the DOJ were filed on June 26, 2008 by both Invitrogen and ABI, and the statutory waiting period under the HSR Act expired at 11:59 p.m. on Monday, July 28, 2008. Each party is also required to (1) make, on a timely basis, their respective filings or notifications under the ECMR and any other applicable foreign statute, rule, regulation, order, decree, administrative and judicial doctrine or other law that is designed or intended to prohibit, restrict or regulate actions having the purpose or effect of monopolization or restraint of

Table of Contents

trade or lessening competition, (2) respond as promptly as practicable to any additional requests for information received from any governmental entity by any party under the HSR Act or any foreign competition law, (3) use all commercially reasonable efforts to cooperate with each other in (a) determining whether any filings are required to be made with, or consents, permits, authorizations or approvals are required to be obtained from, any third parties or other governmental entities (including, without limitation, with respect to the foreign jurisdictions in which ABI's subsidiaries are operating any business and/or failure to file could result in administrative or criminal actions) in connection with the execution and delivery of the merger agreement and the consummation of the transactions contemplated by the merger agreement and (b) timely making all such required or appropriate filings and timely seeking all required or appropriate consents, permits, clearances, authorizations or approvals, and (4) use all reasonable best efforts to take, or cause to be taken, all other actions and do, or cause to be done, all other things necessary, proper or advisable to consummate and make effective the transactions contemplated by the merger agreement, including taking all such further action as reasonably may be necessary to resolve such objections, if any, as the FTC, the DOJ, state antitrust enforcement authorities or competition authorities of any other nation or other jurisdiction, or any other person, may assert under a regulatory law (as defined below) with respect to the transactions contemplated by the merger agreement.

Further, each of ABI and Invitrogen has agreed to keep the other reasonably apprised of the status of matters relating to the completion of the transactions contemplated hereby and work cooperatively in connection with obtaining all required approvals or consents of any governmental entity. In that regard, each party will without limitation: (1) have the right, subject to applicable laws relating to the exchange of information, to review in advance, and to the extent reasonably practicable consult the other on, all the information relating to ABI and its subsidiaries or Invitrogen and its subsidiaries, as the case may be, that appears in any filing made with, or written materials submitted to, any governmental entity in connection with the merger and the other transactions contemplated by the merger agreement; (2) promptly notify the other of, and if in writing, furnish the other with copies of, any communications from or with any governmental entity with respect to the merger or any of the other transactions contemplated by the merger agreement, (3) permit the other party or its counsel to review and discuss in advance, and consider in good faith the views of the other in connection with, any proposed written or oral communication with any governmental entity with respect to the merger or any of the other transactions contemplated by the merger agreement, (4) not participate in any meeting or oral communication with any governmental entity with respect to the merger or any of the other transactions contemplated by the merger agreement unless it consults with the other party in advance and, to the extent permitted by such governmental entity, gives the other party the opportunity to attend and participate thereat, (5) not consent to any voluntary delay of the consummation of the merger at the instruction of any governmental entity without the consent of the other party, which consent will not be unreasonably conditioned, withheld or delayed, (6) furnish the other party with copies of all correspondence, filings and communications (and memoranda setting forth the substance thereof) between it and any such governmental entity with respect to the merger or any of the other transactions contemplated by the merger agreement and the merger and (7) furnish the other party with such necessary information and reasonable assistance as the other may reasonably request in connection with its preparation of necessary filings or submissions of information to any such governmental entity. Each of ABI and Invitrogen may, as each deems advisable and necessary, reasonably designate any competitively sensitive material provided to the other as outside counsel only.

The merger agreement further provides that if any administrative or judicial action or proceeding, including any proceeding by a private party, is instituted (or threatened to be instituted) challenging any transactions contemplated by the merger agreement as violating any regulatory law, each of ABI and Invitrogen will cooperate in all respects with each other and use all reasonable best efforts to contest and resist any such action or proceeding and to have vacated, lifted, reversed or overturned any decree, judgment, injunction or other order, whether temporary, preliminary or permanent, that is in effect and that prohibits, prevents or restricts consummation of the transactions contemplated by the merger agreement. Notwithstanding the foregoing, nothing in the merger agreement will limit a party's right to terminate the merger agreement in accordance with its terms so long as such party has, prior to such termination, complied with its obligations under the merger agreement.

Table of Contents

Invitrogen and ABI agree to take any and all steps and to make any and all undertakings necessary to avoid or eliminate each and every impediment under any regulatory law (as defined below) that may be asserted by any governmental entity with respect to the merger so as to enable the closing of the merger to occur as soon as reasonably possible, including, without limitation, proposing, negotiating, committing to, and effecting by consent decree, hold separate order, or otherwise, the sale, divestiture, licensing or disposition of such assets or businesses of Invitrogen (or its subsidiaries) or ABI (or its subsidiaries) or otherwise taking or committing to take actions that limit Invitrogen's or its subsidiaries' freedom of action with respect to, or their ability to retain, any of the businesses, product lines or assets of Invitrogen (or its subsidiaries) or ABI (or its subsidiaries) in each case, as may be required in order to obtain any clearances or approvals required to consummate the merger, or avoid the entry of, or to effect the dissolution of, any injunction, temporary restraining order, or other order in any suit or proceeding, which would otherwise have the effect of preventing or delaying the closing of the merger. However, neither Invitrogen nor its subsidiaries will be required or permitted to, nor will ABI or any of its subsidiaries without the prior written consent of Invitrogen, sell, divest or otherwise dispose of, hold separate, enter into any license or similar agreement with respect to, restrict the ownership or operation of, or agree to sell, divest or otherwise dispose of, hold separate, enter into any license or similar agreement with respect to, restrict the ownership or operation of, (1) any assets or businesses of ABI or any of its subsidiaries or (2) any assets or businesses of Invitrogen or any of its subsidiaries, in either case, to the extent that the sale, divestiture or other disposition of such assets would be materially adverse to the business, financial condition or the expected benefits of the merger to ABI and its subsidiaries, taken as a whole, or Invitrogen and its subsidiaries, taken as a whole, without the prior written consent of ABI (which may be withheld in ABI's sole and absolute discretion).

For the purposes of this section, the term "regulatory law" means the Sherman Act, as amended, the Clayton Act, as amended, the HSR Act, the Federal Trade Commission Act, as amended, all foreign competition laws, and all other federal, state or foreign, if any, statutes, rules, regulations, orders, decrees, administrative and judicial doctrines and other laws that are designed or intended to prohibit, restrict or regulate actions having the purpose or effect of monopolization or restraint of trade or lessening competition, whether in the communications industry or otherwise, through merger or acquisition.

Notification

ABI and Invitrogen have agreed to promptly advise the other party of:

any occurrence of any event known to it which would reasonably be expected to, individually or in the aggregate:

- (1) have a material adverse effect on it; or
- (2) cause any closing conditions to the merger to be unsatisfied in any material respect at any time prior to the effective time of the merger; or
- (3) any action, suit, proceeding, inquiry or investigation pending or, to the knowledge of ABI, threatened which questions or challenges the validity of the merger agreement;

ABI's Benefit Plans

From and after the effective time of the merger, Invitrogen will honor all of ABI's benefit plans and compensation arrangements and agreements in accordance with their terms as of the effective time of the merger. Through the period ending on December 31, 2009, Invitrogen will provide the former employees of ABI with (1) base salaries, hourly wage rates, and commission, and bonus and non-equity incentive opportunities and (2) welfare and employee benefits plans, programs and arrangements, all of which are not less favorable, in the aggregate, than those provided to them immediately prior to the merger. All equity-based awards will remain discretionary, however, and Invitrogen may change or terminate any existing plan, program or arrangement pursuant to its terms, provided it complies with the merger agreement. From and after January 1, 2010, ABI's employees will receive compensation and benefits pursuant to the welfare, compensation and employee benefit plans, programs and arrangements of Invitrogen provided to similarly situated employees of Invitrogen.

Table of Contents

When the former employees of ABI participate in new Invitrogen plans, Invitrogen will be required to:

credit years of service with ABI before the merger, for purposes of vesting, eligibility to participate and level of benefits (but not benefit accrual under pension or similar plans) under the employee benefit plans of Invitrogen; and

provide for each former employee of ABI to be immediately eligible to participate, without any waiting time, in any and all new plans to the extent coverage is of the same type as ABI employee benefit plan in which such employees participated before the merger.

Invitrogen will also be required to honor ABI's change in control severance program upon the qualifying termination of employment following completion of the merger of a participant who is employed by ABI at the completion of the merger. Invitrogen may not amend the severance program or reduce benefits payable under the program for two years following completion of the merger. After the merger, the severance program will be administered by the directors of Invitrogen who were directors of ABI prior to the effective time of the merger, and Invitrogen will indemnify them with respect to good faith actions taken in connection with the severance program.

The merger agreement also provides that ABI may implement a retention program prior to completion of the merger for the purpose of retaining the services of key employees through the effective time of the merger. The terms of the retention program and eligibility to participate will be determined by ABI's executive officers; provided, however, the aggregate amount to be paid to all participants in the retention program may not exceed \$12 million. The retention period under this program will run through a date that is three months following the merger completion or an employee's earlier scheduled termination date. Payments under the retention program will generally be made upon the earlier of thirty days after termination or three months after the merger closing date.

In the event that ABI's officers determine after implementation of the retention program that additional retention awards are necessary, ABI may grant additional retention awards in order to retain key employees. Prior to granting the additional retention awards, ABI will consult with and consider Invitrogen's reasonable suggestions regarding such awards; provided, however, ABI will have final discretion and authority to grant the awards, subject to the following requirements: (1) the awards will be limited to the minimum amount necessary to accomplish the purpose and intent of a supplemental retention award; (2) the supplemental retention awards will be granted in a manner that provides incentives to critical personnel to remain in employed with ABI; and (3) the supplemental awards will be targeted to employees performing crucial functions.

After the effective time of the merger, Invitrogen will honor in accordance with their terms, and make all payments pursuant to, the ABI Performance Unit Bonus Plan and the ABI Incentive Compensation Programs for fiscal years 2008 and 2009, to the extent not paid by ABI prior to the merger. With respect to ABI's Incentive Compensation Program for fiscal year 2009, or the 2009 ICP, the ABI Board or the Management Resources Committee of the ABI Board will adopt the 2009 ICP consistent with past practice and the merger agreement. Under the 2009 ICP, each participant who is employed by ABI at the effective time of the merger, or an Employee Participant, will be entitled to receive an amount of incentive compensation equal to: (1) the Employee Participant's Eligible Earnings (as defined in the merger agreement) multiplied by (2) (a) the Employee Participant's incentive target percentage multiplied by (b) the Employee Participant's applicable business modifier which will be established as a percentage ranging from 0% to 150% (with 100% as the applicable modifier for target performance) multiplied by (c) the Employee Participant's applicable personal modifier, a percentage ranging from 0% to 150% based on individual contribution.

The business modifiers referenced above will be based on the performance period commencing on July 1, 2008 and ending on the last day of the full fiscal quarter ending immediately prior to the completion of the merger and utilize calculation methods used for the 2008 incentive compensation program. The personal modifiers will be determined by ABI as close in time as reasonably practical prior to the effective time of the merger.

Table of Contents

The amount of Eligible Earnings will be equal to the aggregate amount of the Employee Participant's earnings (which in general will include the employee's base salary and additional compensation for overtime but not bonuses paid pursuant to the 2008 incentive compensation program or otherwise or other types of benefits or payments) paid for the period commencing July 1, 2008 and ending on the earlier of: (I) the date of such Employee Participant's termination of employment, provided he is employed by ABI as of the completion of the merger, (II) December 31, 2008, if the completion of the merger occurs on or before December 31, 2008 provided he is employed by ABI as of December 31, 2008, and (III) the completion of the merger, if it occurs after December 31, 2008 provided he is employed as of the completion of the merger. If the merger is completed on or before February 15, 2009, Invitrogen will pay amounts due under the 2009 ICP no later than March 15, 2009, for Employee Participants subject to Section 409A of the Code (and as soon as administratively practicable thereafter for non-US Employee Participants who are not subject to Section 409A of the Code); provided that if the Effective Time occurs after February 15, 2009, then Invitrogen will make all payments pursuant to the 2009 written ICP 30 calendar days after the completion of the merger.

The 2009 ICP will terminate on the later of (a) December 31, 2008, if the effective time of the merger occurs prior to such date or (b) the effective time of the merger, at which time Employee Participants will begin participating in the corresponding plan of Invitrogen, provided that Employee Participants will not receive credit or be paid compensation under the 2009 ICP or any corresponding Invitrogen plan for the same eligible earnings or period of service.

In addition to the change in control severance program described above, Invitrogen has agreed to honor all of ABI's employment and change in control agreements. Following the merger, the former directors of ABI who continue as directors of Invitrogen will make all determinations regarding whether a particular company employee is entitled to receive severance payments or other benefits under such agreements. Under no circumstances, however, will any employee of ABI be entitled to receive severance benefits under more than one ABI severance plan or agreement.

ABI and Invitrogen have agreed that the consummation of the merger will constitute a change in control for all purposes under ABI's employee benefit plans and individual agreements, including ABI's Supplemental Executive Retirement Plan. The parties have therefore agreed that, at or prior to the effective time of the merger, ABI will place additional funds necessary to satisfy liabilities under such plans in the rabbi trusts established to hold amounts payable under the plans. Invitrogen has agreed to make payments of amounts due in connection with the merger upon or immediately following completion of the merger and will make all other payments due after the merger to former employees of ABI from the trust funds as such payments become payable.

Financing

Invitrogen must use its commercially reasonable efforts to consummate and obtain the financing required for the transactions contemplated by the merger agreement on the terms and conditions described in the Commitment Letter. In connection with the financing, Invitrogen has agreed to:

not, and will not permit Atom Acquisition to, agree to or permit any amendment, replacement, supplement, or other modification of, or waive any of its material rights under, the Commitment Letter or any definitive agreements related to the Commitment Letter (including any and all fee letters), if such amendment, replacement, supplement or other modification or waiver would reasonably be expected to prevent, materially delay, or materially impede the consummation of the financing or the transactions contemplated by the merger agreement;

keep ABI informed on a reasonably current basis in reasonable detail of material developments with respect to the status of its efforts to arrange and consummate the financing;

promptly provide written notification to ABI upon becoming aware of any material breach by any party to the Commitment Letter or any termination of the financing commitments; and

Table of Contents

if Invitrogen becomes aware of any event or circumstance that makes procurement of any portion of the contemplated financing unlikely to occur in the manner contemplated in the Commitment Letter, immediately notify ABI and use its reasonable best efforts to arrange any such portion from alternative sources.

ABI must use its commercially reasonable efforts to provide cooperation, subject to restrictions, in connection with the arrangement of any financing, including reasonable participation in meetings and road shows, the provision of information reasonably requested by Invitrogen and reasonable assistance in the preparation of any confidential information memorandum to be used in syndicating any financing. Neither ABI nor any of its subsidiaries is, prior to the closing date of the merger agreement, (1) required to pay any commitment or other similar fee, (2) has any liability or obligation under any loan agreement or related document or any other document relating to the financing or (3) required to incur any other liability in connection with the financing.

Conditions to Completion of the Merger

The obligations of Invitrogen and ABI to complete the merger are subject to the satisfaction or waiver, if legally permissible, of the following conditions:

the adoption of the merger agreement and approval of the merger by Applied Biosystems stockholders and the approval by Invitrogen stockholders of (1) the issuance of shares of Invitrogen common stock to Applied Biosystems stockholders in the merger and (2) an amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized shares of Invitrogen common stock from 200,000,000 to 400,000,000;

(1) the applicable waiting periods and any approvals applicable to the merger under the HSR Act, the statutory waiting period under which expired at 11:59 p.m. on July 28, 2008, the ECMR and other required approvals will have expired or been earlier terminated or will have been obtained, as applicable, and (2) any other required approvals of ABI or Invitrogen, including any applicable approvals under any non-United States antitrust, competition or investment laws not referenced in clause (1) above, required to be obtained for the consummation, as of the effective time of the merger, other than any such approvals the failure of which to be obtained would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect on ABI or Invitrogen will have been obtained;

the absence of any legal prohibition having the effect of preventing or prohibiting completion of the merger which prohibition continues to be in effect;

the effectiveness under the Securities Act of the registration statement of which this joint proxy statement/prospectus is a part and the absence of any stop order having been issued and remaining in effect;

the approval for listing on the NASDAQ Global Select Market, subject only to official notice of issuance;

the representations and warranties of each party contained in the merger agreement will be true and correct as of the effective time of the merger with the same effect as though made as of the effective time of the merger except (1) for changes specifically permitted by the terms of the merger agreement, (2) that the accuracy of representations and warranties that by their terms speak as of the date of the merger agreement or some other date will be determined as of such date and not as of the effective time of the merger and (3) where any such failure of the representations and warranties in the aggregate to be true and correct would not reasonably be expected to have a Material Adverse Effect on such party (without giving effect to any materiality or Material Adverse Effect qualifications contained therein); and the representations and warranties of a any party with respect to its capital stock and authority to enter into merger agreement will be true and correct in all material respects both when

Table of Contents

made and at and as of the effective time of the merger except (1) for changes specifically permitted by the terms of the merger agreement, and (2) that the accuracy of representations and warranties that by their terms speak as of the date of the merger agreement or some other date will be determined as of such date;

the Celera separation will have been consummated, substantially on the terms set forth in the Celera separation agreement (The Celera separation was completed on July 1, 2008);

the other party's having performed and complied with its covenants in the merger agreement in all material respects prior to the effective time of the merger, and the receipt of a certificate from the officers of the other party to that effect; and

the receipt by each party of an opinion from the party's counsel substantially to the effect that the merger will be treated as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code and that ABI and Invitrogen will each be treated as a party to the reorganization within the meaning of Section 368(b) of the Internal Revenue Code.

Termination of the Merger Agreement

Invitrogen and ABI may mutually agree in writing by action of their respective boards of directors, at any time before the effective time of the merger, to abandon the merger and terminate the merger agreement. Also, either Invitrogen or ABI may terminate the merger agreement in a number of circumstances, including if:

the merger is not consummated by March 11, 2009, unless that date is extended to June 11, 2009 on the terms provided in the merger agreement, which date, as it may be extended, is referred to as the outside date;

Applied Biosystems stockholders fail to adopt the merger agreement and approve the merger at the Applied Biosystems special meeting of stockholders;

Invitrogen stockholders fail to approve the issuance of shares of Invitrogen common stock in the merger at the Invitrogen special meeting of stockholders; or

any governmental entity prohibits the merger and that prohibition has become final and nonappealable, except that the party seeking to terminate the merger agreement must have used its commercially reasonable efforts to remove the prohibition.

Invitrogen also may terminate the merger agreement if:

ABI breaches any representation, warranty, covenant or agreement made by ABI in the merger agreement or any representation and warranty made by ABI has become untrue after the execution of the merger agreement, in each case, so that such breach would give rise to the failure of a closing condition regarding the accuracy of ABI's representations and warranties or ABI's compliance with its covenants and agreements and such breach or failure to be true is not cured within 30 days of receipt of notice from Invitrogen; or

prior to the Applied Biosystems special meeting of stockholders, ABI's board of directors or committee thereof (1) fails to call or hold the Applied Biosystems special meeting of stockholders, (2) fails to include in this joint proxy statement/prospectus its recommendation that Applied Biosystems stockholders adopt and approve the merger agreement and the merger, or (3) withdraws, modifies or changes its recommendation to Applied Biosystems stockholders in a manner adverse to Invitrogen, or approves or recommends any alternative transaction.

ABI also may terminate the merger agreement if:

Invitrogen breaches any representation, warranty, covenant or agreement made by Invitrogen in the merger agreement or any representation and warranty made by Invitrogen has become untrue after the

Table of Contents

execution of the merger agreement, in each case, so that such breach would give rise to the failure of a closing condition regarding the accuracy of the Invitrogen's representations and warranties or Invitrogen's compliance with its covenants and agreements and such breach or failure to be true is not cured within 30 days of receipt of notice from ABI;

prior to the Applied Biosystems special meeting of stockholders, ABI receives an unsolicited bona fide written acquisition proposal (other than the merger agreement and the merger) in compliance with the applicable provisions of the merger agreement that ABI's board of directors has determined in good faith is a superior proposal, ABI's board of directors has determined in good faith that the failure to take such action would be inconsistent with its fiduciary duties under applicable law, and ABI has complied with its obligations set forth in the merger agreement with respect to acquisition proposals; or

prior to the Invitrogen special meeting of stockholders, the Invitrogen Board or committee thereof (1) fails to call or hold the Invitrogen special meeting of stockholders, (2) fails to include in this joint proxy statement/prospectus its recommendation that the stockholders approve the issuance of Invitrogen common stock in order to consummate the merger, or (3) withdraws, modifies or changes its recommendation to the stockholders of Invitrogen in favor of the stock issuance or the increase in the number of authorized shares of Invitrogen common stock in a manner adverse to ABI.

Termination Fee

ABI has agreed to pay Invitrogen a fee of \$150 million if:

the merger agreement is terminated by Invitrogen at any time prior to the Applied Biosystems stockholders adopting and approving the merger agreement and approving merger, if ABI, its board of directors or any committee thereof, for any reason, (1) fails to call or hold the Applied Biosystems special meeting of stockholders, (2) fails to include in this joint proxy statement/prospectus the recommendation of the its board of directors that such stockholders adopt and approve the merger agreement and approve the merger, or (3) withdraws, modifies or changes its recommendation in a manner adverse to Invitrogen;

the merger agreement is terminated by ABI, at any time before the Applied Biosystems stockholders adopt and approve the merger agreement and approve the merger, if (1) ABI receives a superior proposal, (2) its board of directors determines in good faith (after consultation with its financial advisors and outside legal advisors) that the failure to take such action would be inconsistent with its fiduciary duties under applicable law; (3) ABI's board of directors authorizes ABI, subject to complying with the terms of the merger agreement, to enter into a binding written agreement concerning the transaction that constitutes a superior proposal; (4) ABI has complied in all material respects with its obligations; and (5) Invitrogen does not make, within the notice period, an offer that the board of directors of ABI determines, in good faith (after consultation with its financial advisors and outside legal advisors), is at least as favorable to Applied Biosystems stockholders as the superior proposal; provided that ABI may not enter into any such binding agreement during the notice period; or

(1) any person makes an alternative transaction proposal for ABI after the date of the merger agreement which proposal has been publicly disclosed and not withdrawn and the merger agreement is terminated by Invitrogen or ABI if the Applied Biosystems stockholders do not adopt and approve the merger agreement or and approve the merger at the Applied Biosystems special meeting of stockholders, and (2) within twelve months after the termination of the merger agreement, an alternative transaction is consummated or any definitive agreement with respect to such alternative transaction is entered into.

For the purposes of the discussion above and below, the term "alternative transaction" is as defined under "Merger Agreement - Invitrogen and ABI Prohibited from Soliciting Other Offers" above except that the references to "25%" in the definition of "alternative transaction" under "Merger Agreement - Invitrogen and ABI Prohibited from Soliciting Other Offers" above shall be deemed to be references to "50%".

Table of Contents

Invitrogen has agreed to pay ABI a fee of \$150 million if:

the merger agreement is terminated by ABI at any time prior to the Invitrogen stockholders approving the issuance of Invitrogen common stock in connection with the merger and amending Invitrogen's restated certificate of incorporation to increase the number of authorized shares of Invitrogen common stock, if Invitrogen, its board of directors or any committee thereof, for any reason, (1) fails to call or hold the Invitrogen special meeting of stockholders, (2) fails to include in this joint proxy statement/prospectus the recommendation of the its board of directors that such stockholders approve the stock issuance, or (3) withdraws, modifies or changes its recommendation in a manner adverse to ABI; or

(1) any person will have made an alternative transaction proposal for Invitrogen after the date of the merger agreement which proposal has been publicly disclosed and not withdrawn and the merger agreement is terminated by Invitrogen or ABI if the Invitrogen stockholders do approve of the stock issuance and the amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized shares of Invitrogen common stock at the Invitrogen special meeting of stockholders, and (2) within twelve months after the termination of the merger agreement, an alternative transaction will have been consummated or any definitive agreement with respect to such alternative transaction will have been entered into.

Effect of Termination

In the event of termination of the merger agreement by either Invitrogen or ABI in accordance with the terms of the merger agreement, the merger agreement will immediately become void and there will be no liability on the part of any of the parties to the merger agreement. However, no termination will relieve any party to the merger agreement of any liability or damages resulting from any willful or intentional breach of the merger agreement.

Fees and Expenses

Except as provided under Termination Fee, all fees and expenses incurred in connection with the merger will be paid by the party incurring the fees or expenses, whether or not the merger is consummated, other than expenses incurred in connection with the printing and mailing of this joint proxy statement/prospectus or other printing costs related to the transactions and the actions contemplated by the merger agreement, which will be shared equally by Invitrogen and ABI and other than expenses incurred in connection with filing fees incurred in connection with filing this joint proxy statement/prospectus which will be shared equally by Invitrogen and ABI.

Public Announcements

Invitrogen and ABI have agreed to consult with each other before issuing, and provide each other reasonable opportunity to review and comment upon, any press release or other public statements with respect to the merger and the other transactions contemplated by the merger agreement and have also agreed not to issue any such press release or make any public statement prior to such consultation, except as may be required by applicable law or by obligations pursuant to any listing agreement with any national securities exchange.

Stock Exchange Listing

Invitrogen has agreed to use its commercially reasonable efforts to cause the shares of Invitrogen common stock to be issued in the merger to be approved for listing on the NASDAQ Global Select Market, subject to official notice of issuance, prior to the closing of the merger.

Table of Contents

Section 16 Matters

Invitrogen and ABI have agreed to use all commercially reasonable efforts to approve in advance of the closing of the merger, any dispositions of Applied Biosystems stock or acquisitions of Invitrogen common stock resulting from the merger by each individual who is subject to the reporting requirements of Section 16(a) of the Exchange Act.

Stockholder Meetings

Invitrogen and ABI are required to each, as promptly as practicable after this Form S-4 is declared effective under the Securities Act, duly call, give notice of, convene and hold the special meetings of stockholders of each of Invitrogen and ABI.

In addition, Invitrogen and ABI have also agreed to otherwise coordinate and cooperate with each other with respect to the timing of their respective special meetings of stockholders and otherwise comply with all legal requirements applicable to each such special meeting of stockholders.

Management of Invitrogen after the Merger

At the effective time of the merger, the Invitrogen Board will cause the number of directors that will constitute the entire board of directors of Invitrogen immediately following the effective time of the merger increase from nine to twelve. It is currently expected that each of the current members of the Invitrogen Board will continue to serve on the Invitrogen Board following the closing of the merger and that, at the effective time of the merger, three directors of the current board of directors of ABI mutually agreed upon by Invitrogen and ABI will be appointed to serve as directors of Invitrogen. The three former directors of ABI will each be placed in a different class of the board of directors of Invitrogen. At the effective time of the merger, Invitrogen will appoint Mark P. Stevenson, currently the President and Chief Operating Officer of ABI, as the President and Chief Operating Officer of Invitrogen.

Third-Party Standstill Agreements

During the period from the date of merger agreement until the earlier of the effective time of the merger and the date of termination of the merger agreement, Invitrogen and ABI have agreed to use their commercially reasonable efforts to enforce any confidentiality or standstill agreement relating to an alternative transaction proposal to which they or any of their subsidiaries is a party (other than any involving the Invitrogen or ABI or their subsidiaries), except to the extent that the respective boards of directors of Invitrogen and ABI conclude in good faith that enforcement of such agreements would be inconsistent with the directors' fiduciary duties under applicable law.

Amendments, Extensions and Waivers

Amendments

The merger agreement may be amended or supplemented in writing by the parties with respect to any of its terms at any time prior or after approval of the matters presented in connection with the merger by holders of Invitrogen common stock and the Applied Biosystems stockholders. However, after the approval of the merger agreement at the Applied Biosystems special meeting of stockholders and the Invitrogen special meeting of stockholders, there can be no amendment or change to the provisions of the merger agreement which by law or in accordance with the rules of any relevant stock exchange requires further approval by such stockholders without such further approval nor any amendment or change not permitted under applicable law.

Extensions and Waivers

At any time prior to the effective time of the merger, any party to the merger agreement may:

extend the time for the performance of any of the obligations or acts of the other party;

Table of Contents

waive any inaccuracies in the representations and warranties of the other parties contained in the merger agreement or in any document delivered pursuant to the merger agreement; or

waive compliance by the other parties with any of the agreements or conditions contained in the merger agreement.

Notwithstanding the foregoing, no failure or delay by ABI or Invitrogen in exercising any right under the merger agreement will operate as a waiver thereof nor will any single or partial exercise thereof preclude any other or further exercise of any other right under the merger agreement. Any agreement on the part of either party to any extension or waiver is valid only if it is set forth in an instrument in writing signed by that party. The failure of any party to the merger agreement to assert any of its rights under the merger agreement or otherwise does not constitute a waiver of those rights.

Table of Contents

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE MERGER

General

The following summarizes certain material U.S. federal income tax consequences of the merger. The following summary is not binding on the Internal Revenue Service. It is based upon the Internal Revenue Code and the regulations, rulings, and decisions thereunder in effect as of the date of this document, all of which are subject to change, possibly with retroactive effect, and to differing interpretations. This summary, to the extent it addresses the tax consequences to U.S. holders (as defined below) of Applied Biosystems stock, addresses only those stockholders who hold their shares of Applied Biosystems stock as a capital asset, and does not address all of the U.S. federal income tax consequences that may be relevant to particular Applied Biosystems stockholders in light of their individual circumstances, or to Applied Biosystems stockholders who are subject to special rules, such as:

financial institutions;

mutual funds, regulated investment companies or real estate investment trusts;

tax-exempt organizations;

persons whose functional currency is not the U.S. dollar;

insurance companies;

dealers in securities or foreign currencies;

traders in securities who elect to apply a market-to-market method of accounting;

foreign holders (i.e., persons other than U.S. holders, as defined below);

persons who hold shares of Applied Biosystems stock as a hedge against currency risk or as part of a straddle, constructive sale or conversion transaction; or

holders who acquired their shares of Applied Biosystems stock upon the exercise of warrants or employee stock options or otherwise as compensation or through a tax-qualified plan.

In addition, tax consequences under state, local and foreign laws and U.S. federal laws other than U.S. federal income tax laws are not addressed.

Applied Biosystems stockholders are urged to consult their tax advisors as to the specific tax consequences to them of the merger, including the applicability and effect of U.S. federal, state, local and foreign income and other tax laws in their particular circumstances.

For purposes of this discussion, a U.S. holder means a beneficial owner of Applied Biosystems stock who is:

an individual who is a citizen or resident of the United States;

a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized in the United States or under the laws of the United States or any State or the District of Columbia;

an estate the income of which is includible in gross income for U.S. federal income tax purposes regardless of its source; or

a trust if (1) a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons have the authority to control all substantial decisions of the trust or (2) the trust has a valid election in effect under the applicable U.S. Treasury regulations to be treated as a U.S. person for U.S. federal income tax purposes.

Table of Contents

If a business entity classified as a partnership for U.S. federal tax purposes (a partnership) holds Applied Biosystems stock, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. Partners of partnerships holding Applied Biosystems stock should consult their own tax advisers.

Certain Material U.S. Federal Income Tax Consequences of the Merger

It is a condition to the closing of the merger that DLA Piper LLP (US) and Skadden, Arps, Slate, Meagher & Flom LLP deliver opinions, effective as of the date of closing, to Invitrogen and ABI, respectively, substantially to the effect that (1) the merger will be treated for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code and (2) each of Invitrogen and ABI will be treated as a party to the reorganization within the meaning of Section 368(b) of the Internal Revenue Code.

Each tax opinion will be based on certain representations made by Invitrogen and ABI, including factual representations and certifications contained in officers' certificates to be delivered at closing by Invitrogen and ABI, and will assume that these representations are true, correct and complete, without regard to any knowledge limitation. Furthermore, each tax opinion will be subject to certain assumptions, limitations and qualifications. Such opinions also will be based on the assumptions that the merger will be consummated in the manner contemplated by, and in accordance with the provisions of, the merger agreement and that the merger will be effective under the laws of the State of Delaware. Such opinions further assume that the parties have complied with and, if applicable, will continue to comply with, the covenants contained in the merger agreement. If any of these representations or assumptions are inconsistent with the actual facts, the U.S. federal income tax treatment of the merger could be adversely affected.

If the conclusions in the tax opinions delivered at closing are materially different from the opinions described herein, Invitrogen and ABI will resolicit stockholder approval. Further, if the parties waive the condition that they receive such opinions, Invitrogen and ABI will resolicit stockholder approval if the change in tax consequences is material.

An opinion of counsel represents counsel's best legal judgment and is not binding on the Internal Revenue Service or any court. No ruling has been, or will be, sought from the Internal Revenue Service as to the tax consequences of the merger.

Assuming that the merger qualifies as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code, the merger will have the following U.S. federal income tax consequences to Applied Biosystems stockholders:

Applied Biosystems Stockholders Receiving Only Invitrogen Common Stock. No gain or loss will be recognized by an Applied Biosystems stockholder as a result of the surrender of shares of Applied Biosystems stock in exchange for shares of Invitrogen common stock pursuant to the merger, if such holder receives no cash pursuant to the merger, except as discussed below with respect to cash received instead of a fractional share of Invitrogen common stock. The aggregate tax basis of the shares of Invitrogen common stock received in the merger (including any fractional shares of Invitrogen common stock deemed received) will be the same as the aggregate tax basis of the shares of Applied Biosystems stock surrendered in exchange for the Invitrogen common stock. The holding period of the shares of Invitrogen common stock received (including any fractional share of Invitrogen common stock deemed received) will include the holding period of shares of Applied Biosystems stock surrendered in exchange for the Invitrogen common stock.

Applied Biosystems Stockholders Receiving Only Cash. An Applied Biosystems stockholder that does not receive any shares of Invitrogen common stock pursuant to the merger will generally recognize gain or loss equal to the difference between the amount of cash received and the holder's adjusted tax basis in the shares of Applied Biosystems stock exchanged in the merger. Such gain or loss will generally be a capital gain or loss, and will

Table of Contents

generally be a long-term capital gain or loss to the extent that, at the effective time of the merger, the holder has a holding period in such Applied Biosystems stock of more than one year. The deductibility of capital losses is subject to limitations.

Applied Biosystems Stockholders Receiving Both Cash and Invitrogen Common Stock. If an Applied Biosystems stockholder receives both Invitrogen common stock and cash (other than cash received instead of a fractional share of Invitrogen common stock) pursuant to the merger, that holder will generally recognize gain equal to the lesser of (a) the amount of cash received (excluding cash received instead of a fractional share of Invitrogen common stock) and (b) the amount by which the sum of the amount of cash received and the value (as of the effective time of the merger) of the Invitrogen common stock received exceeds the holder's adjusted tax basis in the shares of Applied Biosystems stock exchanged in the merger. This gain will generally be capital gain unless the holder's exchange of Applied Biosystems stock for cash and Invitrogen common stock has the effect of the distribution of a dividend.

In general, the determination as to whether the receipt of cash has the effect of a distribution of a dividend depends upon whether and to what extent the transactions related to the merger will be deemed to reduce a holder's percentage ownership of Invitrogen immediately following the merger. In making a determination as to whether or not the receipt of cash has the effect of a distribution of a dividend, certain constructive ownership rules must be taken into account. For purposes of this determination, a holder will be treated as if it first exchanged all of its Applied Biosystems stock solely for Invitrogen common stock, and then a portion of the Invitrogen stock so received was immediately redeemed by Invitrogen for the cash (excluding cash received instead of a fractional share of Invitrogen common stock) that the holder actually received in the merger. The Internal Revenue Service has indicated that a reduction in the interest of a minority stockholder that owns a small number of shares in a publicly traded and widely held corporation and that exercises no control over corporate affairs would result in capital gain (as opposed to dividend) treatment.

Further, capital gains treatment should be available to any U.S. holder who receives both cash and Invitrogen common stock in the merger if the percentage of Invitrogen common stock actually and constructively owned by such U.S. holder immediately after the merger is less than 80% of the percentage of Invitrogen common stock which such U.S. holder would have owned (actually and constructively) were such U.S. holder to have received solely Invitrogen common stock in the merger. A holder is urged to consult its tax advisers about the possibility that all or a portion of any cash received in exchange for Applied Biosystems stock will be treated as a dividend. The capital gain recognized generally will be long-term capital gain to the extent that, at the effective time of the merger, the holder has a holding period in Applied Biosystems stock exchanged in the merger of more than one year.

The aggregate tax basis of the shares of Invitrogen common stock received in the merger (including any fractional share of Invitrogen common stock deemed received) to a holder receiving cash in the merger that was not treated as a dividend will be the same as the aggregate tax basis of the shares of Applied Biosystems stock surrendered in exchange therefor in the merger, increased by the amount of capital gain recognized (excluding gain recognized with respect to cash received instead of fractional shares) and reduced by the amount of cash received (excluding cash received instead of fractional shares). The holding period of the shares of Invitrogen common stock received (including any fractional share of Invitrogen common stock deemed received) will include the holding period of shares of Applied Biosystems stock surrendered in exchange for the Invitrogen common stock. If a holder's tax basis in shares of Applied Biosystems stock exceeds the sum of the amount of cash received and the value of the Invitrogen common stock received in exchange for the shares of Applied Biosystems stock, such a holder will not recognize loss.

Applied Biosystems Stockholders Receiving Cash Instead of a Fractional Share. Applied Biosystems stockholders who receive cash instead of fractional shares of Invitrogen common stock will be treated as having received the fractional shares in the merger and then as having exchanged the fractional shares for cash. These holders will generally recognize gain or loss equal to the difference between the tax basis allocable to the

Table of Contents

fractional shares and the amount of cash received. The gain or loss generally will be capital gain or loss and long-term capital gain or loss if the Applied Biosystems stock exchanged has been held for more than one year at the effective time of the merger. The deductibility of capital losses is subject to limitations.

Applied Biosystems Stockholders Exercising Appraisal Rights

A U.S. holder who exercises appraisal rights under Delaware law and receives cash in exchange for its Applied Biosystems stock will generally recognize capital gain or loss equal to the difference between the cash received by such holder (other than any cash received that is treated as actual or imputed interest, which will be taxable as ordinary income) and such holder's tax basis in the Applied Biosystems stock exchanged therefor.

Information Reporting and Backup Withholding

Cash payments received in the merger by a U.S. holder may, under certain circumstances, be subject to information reporting and backup withholding at a rate of 28% of the cash payable to the holder, unless the holder provides proof of an applicable exemption, furnishes its taxpayer identification number (in the case of individuals, their social security number) and otherwise complies with all applicable requirements of the backup withholding rules. Any amounts withheld from payments to a U.S. holder under the backup withholding rules are not additional tax and will be allowed as a refund or credit against the U.S. holder's U.S. federal income tax liability, provided the required information is timely furnished to the Internal Revenue Service.

The foregoing discussion is not intended to be legal or tax advice to any particular Applied Biosystems stockholder. Tax matters regarding the merger are very complicated, and the tax consequences of the merger to any particular Applied Biosystems stockholder will depend on that stockholder's particular situation. Applied Biosystems stockholders should consult their own tax advisors regarding the specific tax consequences of the merger, including tax return reporting requirements, the applicability of federal, state, local and non-U.S. tax laws and the effect of any proposed change in the tax laws to them.

Table of Contents**COMPARATIVE STOCK PRICES AND DIVIDENDS**

Invitrogen common stock is listed on the NASDAQ Select Global Market under the symbol IVGN. Applied Biosystems stock is listed on the NYSE under the symbol ABI. The following table sets forth the high and low trading prices per share of Invitrogen common stock for the periods indicated. On April 30, 2008, Invitrogen announced a two-for-one stock split in the form of a 100% stock dividend with a record date of May 16, 2008, and a distribution date of May 27, 2008. Share and per share amounts have been restated to reflect the stock splits for all periods presented.

| Calendar Period | Invitrogen | |
|--|------------|----------|
| | High | Low |
| Fiscal year ended December 31, 2008 | | |
| Third Quarter (through September 5, 2008) | \$ 44.65 | \$ 38.00 |
| Second Quarter ended June 30, 2008 | \$ 48.13 | \$ 36.73 |
| First Quarter ended March 31, 2008 | \$ 49.00 | \$ 38.89 |
| Fiscal year ended December 31, 2007 | | |
| Fourth quarter ended December 31, 2007 | \$ 49.58 | \$ 40.62 |
| Third quarter ended September 30, 2007 | \$ 41.88 | \$ 35.12 |
| Second quarter ended June 30, 2007 | \$ 37.50 | \$ 31.71 |
| First quarter ended March 31, 2007 | \$ 33.81 | \$ 27.96 |
| Fiscal year ended December 31, 2006 | | |
| Fourth quarter ended December 31, 2006 | \$ 33.43 | \$ 27.35 |
| Third quarter ended September 30, 2006 | \$ 33.34 | \$ 27.91 |
| Second quarter ended June 30, 2006 | \$ 35.21 | \$ 30.90 |
| First quarter ended March 31, 2006 | \$ 38.33 | \$ 32.75 |

The following table sets forth the high and low trading prices per share of Applied Biosystems stock for the periods indicated. For each of the periods listed below, ABI declared a cash dividend of \$0.0425 per share of Applied Biosystems stock.

| Calendar Period | Applied Biosystems Inc. | |
|--|-------------------------|----------|
| | High | Low |
| Fiscal year ended June 30, 2009 | | |
| First quarter ended September 30, 2008 (through September 5, 2008) | \$ 37.25 | \$ 32.74 |
| Fiscal year ended June 30, 2008 | | |
| Fourth quarter ended June 30, 2008 | \$ 35.54 | \$ 28.74 |
| Third quarter ended March 31, 2008 | \$ 34.73 | \$ 28.86 |
| Second quarter ended December 31, 2007 | \$ 37.67 | \$ 32.63 |
| First quarter ended September 30, 2007 | \$ 35.00 | \$ 29.51 |
| Fiscal year ended June 30, 2007 | | |
| Fourth quarter ended June 30, 2007 | \$ 31.41 | \$ 27.79 |
| Third quarter ended March 31, 2007 | \$ 37.59 | \$ 28.35 |
| Second quarter ended December 31, 2006 | \$ 39.49 | \$ 32.48 |
| First quarter ended September 30, 2006 | \$ 33.59 | \$ 29.86 |

The following table sets forth the closing sale prices of Invitrogen common stock and Applied Biosystems stock, as reported on the NASDAQ Select Global Market and the NYSE, respectively, on (1) June 11, 2008, the last full trading day before the public announcement of the proposed merger, and (2) September 5, 2008, the last practicable trading day prior to mailing this joint proxy statement/prospectus.

Table of Contents

The table also includes the equivalent value of the merger consideration per share of Applied Biosystems stock for shares receiving mixed consideration on June 11, 2008 and September 5, 2008. The equivalent prices per share are calculated by (1) multiplying the closing price of Invitrogen common stock on those dates by 0.4543, which is the number of shares of Invitrogen common stock to be issued pursuant to the merger per share of Applied Biosystems stock and (2) adding \$17.10, which is the cash portion of the merger consideration, plus the applicable additional cash amount. For purposes of the calculation of the additional cash amount, it was assumed that 20-day VWAP of Invitrogen common stock the average volume-weighted average price of the Invitrogen common stock over the 20 consecutive trading days ending three business days before the merger, which is the value for Invitrogen common stock on which the cash adjustment is based is equal to the applicable closing price of Invitrogen common stock specified in the table below.

| | Invitrogen Closing Price | Applied Biosystems Closing Price | Equivalent Per Share Value Mixed Consideration⁽¹⁾ |
|-------------------|-------------------------------------|---|---|
| June 11, 2008 | \$ 43.35 | \$ 32.44 | \$ 36.79 |
| September 5, 2008 | \$ 41.03 | \$ 35.93 | \$ 35.73 |

(1) Assumes no proration for mixed consideration.

The table also includes the equivalent value of the merger consideration per share of Applied Biosystems stock for shares receiving stock consideration on June 11, 2008 and September 5, 2008. The equivalent prices per share are calculated by multiplying the closing price of Invitrogen common stock on those dates by 0.8261, which is the number of shares of Invitrogen common stock to be issued pursuant to the merger per share of Applied Biosystems stock, plus the applicable additional cash amount. For purposes of the calculation of the additional cash amount, it was assumed that 20-day VWAP of Invitrogen common stock the average volume-weighted average price of the Invitrogen common stock over the 20 consecutive trading days ending three business days before the merger, which is the value for Invitrogen common stock on which the cash adjustment is based is equal to the applicable closing price of Invitrogen common specified in the table below.

| | Invitrogen Closing Price | Applied Biosystems Closing Price | Equivalent Per Share Value Stock Consideration⁽¹⁾ |
|-------------------|-------------------------------------|---|---|
| June 11, 2008 | \$ 43.35 | \$ 32.44 | \$ 35.81 |
| September 5, 2008 | \$ 41.03 | \$ 35.93 | \$ 33.89 |

(1) Assumes no proration for mixed consideration.

As of September 5, 2008, there were 92,117,285 shares of Invitrogen common stock outstanding held by approximately 1,120 stockholders of record, and 169,541,084 shares of Applied Biosystems stock outstanding held by approximately 4,792 stockholders of record.

Dividends

Invitrogen has never declared or paid any cash dividends on its common stock and currently does not anticipate paying such cash dividends. It currently anticipates that it will retain all of its future earnings for use in the development and expansion of its business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of its board of directors and will depend upon the results of operations, financial conditions, tax laws and other factors as the board of directors, in its direction, deems relevant. Additionally, in connection with a loan facility entered into in January 2006 with Bank of America, Invitrogen agreed to certain financial covenants that may, in certain circumstances, restrict Invitrogen's ability to pay dividends. Covenants that Invitrogen expects to be included in the Credit Facilities, which will be used to finance the merger, will likely restrict its ability to pay dividends. In addition, Invitrogen will be required to comply with financial covenants contained in the Credit Facilities that may have the effect of limiting its ability to pay dividends.

Table of Contents

ABI has declared a dividend of \$0.0425 per share per quarter for each of the eight quarters ended June 30, 2008. ABI currently expects to declare and pay its regular quarterly dividend of \$0.0425 per share of Applied Biosystems stock through the completion of the merger.

Table of Contents

THE INVITROGEN SPECIAL MEETING OF STOCKHOLDERS

General

This joint proxy statement/prospectus is being provided to Invitrogen stockholders as part of a solicitation of proxies by the Invitrogen board of directors for use at the Invitrogen special meeting of stockholders. This joint proxy statement/prospectus provides Invitrogen stockholders with the information they need to know to be able to vote, or instruct their brokers or other nominees to vote, at the Invitrogen special meeting of stockholders.

Date, Time, Place and Purpose of the Invitrogen Special Meeting of Stockholders

The special meeting of Invitrogen stockholders will be held on October 16, 2008, at 9 a.m., Pacific time, at Invitrogen's headquarters, 5781 Van Allen Way, Carlsbad, California. 92008.

Proposals to be Voted on at the Invitrogen Special Meeting of Stockholders

Proposal No. 1: Merger Proposal

The proposal calls for consideration of and a vote for the Invitrogen stockholders to approve the issuance of Invitrogen common stock to Applied Biosystems stockholders in the merger of ABI with and into Atom Acquisition, a direct wholly owned subsidiary of Invitrogen, as contemplated by the Agreement and Plan of Merger, dated as of June 11, 2008, as amended by Amendment No. 1 thereto, dated as of September 9, 2008, by and among Invitrogen, Atom Acquisition and ABI, as such agreement may be amended from time to time, referred to as the Merger Proposal.

Proposal Summary

The issuance of Invitrogen common stock to Applied Biosystems stockholders in the merger of ABI with and into Atom Acquisition, a direct wholly owned subsidiary of Invitrogen, would be in accordance with the Agreement and Plan of Merger, dated as of June 11, 2008, as amended by Amendment No. 1 thereto, dated as of September 9, 2008, by and among Invitrogen, Atom Acquisition and ABI as such agreement may be amended from time to time and as described in this joint proxy statement/prospectus. For a full description of the issuance of Invitrogen common stock to Applied Biosystems stockholders in the merger, see *The Merger Agreement* Merger Consideration.

Recommendation of the Board of Directors

The Board of Directors recommends that you vote FOR issuance of Invitrogen common stock to Applied Biosystems stockholders in the merger of ABI with and into Atom Acquisition.

Proposal No. 2: Amended Invitrogen Restated Certificate of Incorporation Proposal

The proposal calls for consideration of and a vote for a proposed amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized shares of common stock from 200,000,000 to 400,000,000 (*Proposal 2* or the *Amended Invitrogen Restated Certificate of Incorporation Proposal*).

Proposal Summary

Upon filing the certificate of amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized shares of common stock from 200,000,000 to 400,000,000, the first paragraph of Article IV of Invitrogen's restated certificate of incorporation will be as follows:

The total number of shares of capital stock which the Corporation shall have the authority to issue is 406,405,884 shares, of which (a) 6,405,884 shares shall be preferred stock, par value \$.01 per share (*Preferred Stock*), and (b) 400,000,000 shares shall be common stock, par value \$.01 per share.

The terms of additional shares of common stock will be identical to those of the currently outstanding shares of Invitrogen common stock. However, because holders of Invitrogen common stock have no preemptive rights

Table of Contents

to purchase or subscribe for any unissued stock of Invitrogen, the issuance of additional shares of common stock will reduce the current stockholders' percentage of ownership interest in the total outstanding shares of common stock.

The increase in the number of authorized but unissued shares of common stock is required in order to consummate the merger. Approximately 80 million shares of Invitrogen common stock needs to be issued in order to consummate the merger. Currently, the authorized capital stock of Invitrogen consists of 200,000,000 shares of common stock, par value \$.01 per share. As of September 5, 2008, (1) 92,117,285 shares of Invitrogen common stock were outstanding, (2) 11,676,270 shares of Invitrogen common stock were issuable upon the exercise or settlement of options under the various Invitrogen equity incentive plans, (3) 1,541,768 shares of Invitrogen common stock were issuable upon the exercise or settlement of restricted stock units under the Invitrogen 2004 Equity Incentive Plan and (4) an additional 5,481,095 shares of Invitrogen common stock were reserved for issuance under the Invitrogen 2004 Equity Incentive Plan. In addition, 507,352 shares of Invitrogen common stock were subject to outstanding option grants outside the various Invitrogen equity incentive plans. Currently, 26,204,240 shares of Invitrogen common stock are issuable upon the conversion of Invitrogen's convertible senior notes.

The proposed increase in the authorized number of shares of common stock could have a number of effects on the stockholders of Invitrogen depending upon the exact nature and circumstances of any actual issuances of authorized but unissued shares. The increase could have an anti-takeover effect, in that additional shares could be issued (within the limits imposed by applicable law) in one or more transactions that could make a change in control or takeover of Invitrogen difficult. For example, additional shares could be issued by Invitrogen so as to dilute the stock ownership or voting rights of person seeking to obtain control of Invitrogen. Similarly, the issuance of additional shares to certain persons allied with Invitrogen's management could have the effect of making it more difficult to remove Invitrogen's current management by diluting the stock ownership or voting rights of persons seeking to cause such removal.

At any time prior to the effectiveness of the filing of this proposed amendment to Invitrogen's restated certificate of incorporation to increase the number of authorized shares of common stock from 200,000,000 to 400,000,000, notwithstanding stockholder approval of this proposed amendment, Invitrogen's board of directors may abandon this proposed amendment without any further action by Invitrogen's stockholders. For a full description of the Amendment to Invitrogen's Restated Certificate of Incorporation, please refer to the copy of the Amendment to the Restated Invitrogen Certificate of Incorporation attached to this joint proxy statement/prospectus as Annex G.

Recommendation of the Board of Directors

The Board of Directors recommends unanimously that you vote FOR the amendment of the restated certificate of incorporation which will increase the number of authorized shares of common stock.

Proposal No. 3: Adjournment Proposal

The proposal calls for consideration of and a vote upon any adjournments of the Invitrogen special meeting of stockholders, if necessary, to solicit additional proxies in favor of any or all of the foregoing proposals (the Adjournment Proposal).

Recommendation of the Board of Directors

The Board of Directors recommends unanimously that you vote FOR any adjournments of the Invitrogen special meeting of stockholders to solicit additional proxies in favor of any or all of the foregoing proposals.

Table of Contents

Record Date; Outstanding Shares; Shares Entitled to Vote

Only holders of record of Invitrogen common stock at the close of business on the record date, September 5, 2008, are entitled to notice of and to vote at the Invitrogen special meeting of stockholders. As of the Invitrogen record date, there were 92,117,285 shares of Invitrogen common stock outstanding and entitled to vote at the Invitrogen special meeting of stockholders, held by approximately 1,120 holders of record. Each holder of Invitrogen common stock is entitled to one vote for each share of Invitrogen common stock owned as of the Invitrogen record date.

A complete list of Invitrogen stockholders will be available for review at the Invitrogen special meeting of stockholders and at the executive offices of Invitrogen during regular business hours for a period of ten days before the special meeting.

Information Concerning Solicitation and Voting

Quorum and Vote Required

A majority of the shares of Invitrogen common stock issued and outstanding and entitled to vote as of the record date must be present in person or represented by proxy at the Invitrogen special meeting of stockholders to constitute a quorum. A quorum must be present before a vote can be taken on the Merger Proposal and the Amended Restated Certificate of Incorporation Proposal. Abstentions and broker non-votes, if any, which are described below, will be counted for purposes of determining the presence of a quorum at the Invitrogen special meeting of stockholders. If a quorum is not present, Invitrogen expects that the Invitrogen special meeting of stockholders will be adjourned or postponed to solicit additional proxies. At any subsequent reconvening of the Invitrogen special meeting of stockholders, all proxies will be voted in the same manner as the proxies would have been voted at the original convening of the Invitrogen special meeting of stockholders, except for any proxies that have been effectively revoked or withdrawn prior to the subsequent meeting.

In accordance with the NASDAQ Global Select Market listing requirements and the merger agreement, the approval by Invitrogen stockholders of the issuance of shares of Invitrogen common stock pursuant to the merger agreement requires a majority of the votes cast on the proposal, provided that the total votes cast on such proposal represent over 50% of the outstanding shares of Invitrogen common stock entitled to vote on such proposal. However, under Delaware law, the approval by Invitrogen stockholders of the amendment to the restated certificate of incorporation of Invitrogen to increase the number of authorized shares of common stock requires the affirmative vote of a majority of the outstanding shares of common stock. Accordingly, since the approval of the proposal to amend Invitrogen's restated certificate of incorporation to increase the number of authorized shares is a condition of the completion of the merger, the vote of 50% of the outstanding shares of Invitrogen common stock is effectively required to approve the merger.

The approval of the proposal to grant authority to the proxyholders to vote to adjourn the Invitrogen special meeting of stockholders requires the affirmative vote of the holders of a majority of the shares of Invitrogen common stock present in person or represented by proxy at the special meeting and entitled to vote thereon, whether or not a quorum is present.

Voting by Invitrogen's Directors and Executive Officers

As of the Invitrogen record date for the Invitrogen special meeting of stockholders, the directors and executive officers of Invitrogen as a group owned and were entitled to vote approximately 342,569 shares of Invitrogen common stock, or approximately 0.4% of the outstanding shares of Invitrogen on that date.

Voting; Proxies; Revocation

You may vote by proxy or in person at the Invitrogen special meeting of stockholders. Votes cast by proxy or in person at the Invitrogen special meeting of stockholders will be tabulated and certified by Invitrogen's transfer agent.

Table of Contents

Voting in Person

If you plan to attend the Invitrogen special meeting of stockholders and wish to vote in person, you will be given a ballot at the special meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee, or in street name, and you wish to vote in person at the Invitrogen special meeting of stockholders, you must bring to the special meeting a proxy from the record holder of the shares authorizing you to vote at the Invitrogen special meeting of stockholders.

Voting by Proxy

Your vote is very important. Accordingly, please complete, sign and return the enclosed proxy card whether or not you plan to attend the Invitrogen special meeting of stockholders in person. You should vote your proxy even if you plan to attend the Invitrogen special meeting of stockholders. You can always change your vote at the special meeting. Voting instructions are included on your proxy card. If you properly give your proxy and submit it to Invitrogen in time to vote, one of the individuals named as your proxy will vote your shares as you have directed. A proxy card is enclosed for your use.

The method of voting by proxy differs for shares held as a record holder and shares held in street name. If you hold your shares of Invitrogen common stock as a record holder, you may vote by completing, dating and signing the enclosed proxy card and promptly returning it in the enclosed, pre-addressed, postage-paid envelope or otherwise mailing it to Invitrogen, or by telephone by following the instructions on the enclosed proxy card. If you hold your shares of Invitrogen common stock in street name, which means your shares are held of record by a broker, bank or nominee, you will receive instructions from your broker, bank or other nominee that you must follow in order to vote your shares. Your broker, bank or nominee may allow you to deliver your voting instructions by telephone. Please see the voting instructions from your broker, bank or nominee that accompany this joint proxy statement/prospectus.

All properly signed proxies that are received prior to the Invitrogen special meeting of stockholders and that are not revoked will be voted at the special meeting according to the instructions indicated on the proxies or, if no direction is indicated, they will be voted **FOR** the Merger Proposal, **FOR** the Amended Invitrogen Restated Certificate of Incorporation Proposal and **FOR** the Adjournment Proposal, if necessary, to permit further solicitation of proxies if there are not sufficient votes at the time of the Invitrogen special meeting of stockholders in favor of the foregoing.

Revocation of Proxy

You may revoke your proxy at any time before your proxy is voted at the Invitrogen special meeting of stockholders by taking any of the following actions:

delivering to the corporate secretary of Invitrogen a signed written notice of revocation, bearing a date later than the date of the proxy, stating that the proxy is revoked;

signing and delivering a new proxy, relating to the same shares and bearing a later date;

submitting another proxy by telephone (your latest telephone voting instructions are followed); or

attending the Invitrogen special meeting of stockholders and voting in person, although attendance at the special meeting will not, by itself, revoke a proxy.

If your shares are held in street name, you may change your vote by submitting new voting instructions to your broker, bank or other nominee. You must contact your broker, bank or other nominee to find out how to do so.

Written notices of revocation and other communications with respect to the revocation of Invitrogen proxies should be addressed to:

Invitrogen Corporation

Edgar Filing: INVITROGEN CORP - Form S-4/A

5791 Van Allen Way

Carlsbad, California 92008

Attn: Corporate Secretary

141

Table of Contents

Abstentions and Broker Non-Votes

For purposes of all of the proposals, abstentions will have the same effect as voting against the proposals.

Brokers who hold shares of Invitrogen common stock in street name for a beneficial owner of those shares typically have the authority to vote in their discretion on routine proposals when they have not received instructions from beneficial owners. However, brokers are not allowed to exercise their voting discretion with respect to the approval of matters that are non-routine, such as approval of the issuance of shares of Invitrogen common stock pursuant to the merger agreement, without specific instructions from the beneficial owner. Broker non-votes are shares held by a broker or other nominee that are represented at the Invitrogen special meeting of stockholders, but with respect to which the broker or nominee is not instructed by the beneficial owner of such shares to vote on the particular proposal and the broker does not have discretionary voting power on such proposal. If your broker holds your Invitrogen common stock in street name, your broker will vote your shares only if you provide instructions on how to vote by filling out the voter instruction form sent to you by your broker with this joint proxy statement/prospectus. A broker non-vote will have the same effect as a vote against the proposal to amend Invitrogen's restated certificate of incorporation; a broker non-vote will have no effect on the proposals to issue shares of Invitrogen common stock and to adjourn the special meeting.

Proxy Solicitation

Invitrogen is soliciting proxies for the Invitrogen special meeting of stockholders from Invitrogen stockholders. Invitrogen will bear the entire cost of soliciting proxies from Invitrogen stockholders, except that Invitrogen and ABI have each agreed to share equally all expenses incurred in connection with the printing of this joint proxy statement/prospectus and related proxy materials. In addition to the solicitation of proxies by mail, Invitrogen will request that brokers, banks and other nominees send proxies and proxy materials to the beneficial owners of Invitrogen common stock held by them and secure their voting instructions, if necessary. Invitrogen will reimburse those record holders for their reasonable expenses. Invitrogen has also made arrangements with the Altman Group to assist it in soliciting proxies, and has agreed to pay the Altman Group's reasonable and customary charges for such services, currently estimated not to exceed \$50,000, plus expenses. Invitrogen also may use several of its regular employees, who will not be specially compensated, to solicit proxies from Invitrogen stockholders, either personally or by telephone, Internet, telegram, facsimile or special delivery letter.

Adjournments

An adjournment may be made, from time to time, by approval of the holders of shares representing a majority of the votes present in person or by proxy at the Invitrogen special meeting of stockholders, whether or not a quorum exists, without further notice other than by an announcement made at the special meeting.

Assistance

If you need assistance in completing your proxy card or have questions regarding the Invitrogen special meeting of stockholders, please contact the Altman Group, which is assisting Invitrogen with the solicitation of proxies, at (866) 530-8621 or via e-mail to invitrogen@altmangroup.com. Alternatively, you may contact Invitrogen Investor Relations at (760) 603-7200 or via e-mail at ir@invitrogen.com or write to Invitrogen Corporation, 5791 Van Allen Way, Carlsbad, California, 92008, Attn: Investor Relations.

Table of Contents

THE APPLIED BIOSYSTEMS SPECIAL MEETING OF STOCKHOLDERS

General

This joint proxy statement/prospectus is being provided to Applied Biosystems stockholders as part of a solicitation of proxies by the board of directors of ABI for use at the Applied Biosystems special meeting of stockholders. This joint proxy statement/prospectus provides Applied Biosystems stockholders with the information they need to know to be able to vote, or instruct their brokers or other nominees to vote, at the Applied Biosystems special meeting of stockholders.

Date, Time, Place and Purpose of the Applied Biosystems Special Meeting of Stockholders

The Applied Biosystems special meeting of stockholders will be held on October 16, 2008, at 9:30 a.m., Eastern time at Applied Biosystems headquarters, located at 301 Merritt 7, Main Avenue (old U.S. Route 7), Norwalk, Connecticut, 06851.

Proposals to be Voted on at the Applied Biosystems Special Meeting of Stockholders

Proposal No. 1: Merger Proposal

The proposal calls for consideration of and a vote upon a proposal for Applied Biosystems stockholders to approve and adopt the Agreement and Plan of Merger, dated as of June 11, 2008, as amended by Amendment No. 1 thereto, dated as of September 9, 2008, by and among Invitrogen, Atom Acquisition, LLC, a direct wholly-owned subsidiary of Invitrogen, and ABI and to approve the merger of ABI with and into Atom Acquisition, LLC, as contemplated by the merger agreement, as such agreement may be amended from time to time.

ABI's board of directors recommends that you vote FOR the approval and adoption of the merger agreement and approval of the merger of ABI with and into Atom Acquisition, LLC.

Proposal No. 2: Adjournment Proposal

The proposal calls for consideration of and a vote upon any adjournments of the Applied Biosystems special meeting of stockholders, if necessary, to solicit additional proxies in favor of any or all of the foregoing proposals.

The ABI board of directors recommends that you vote FOR any adjournments of the Applied Biosystems special meeting of stockholders to solicit additional proxies in favor of any or all of the foregoing proposals.

Record Date; Outstanding Shares; Shares Entitled to Vote

Only holders of record of Applied Biosystems stock at the close of business on the record date, September 5, 2008, are entitled to notice of and to vote at the Applied Biosystems special meeting of stockholders. As of the record date, there were 169,541,084 shares of Applied Biosystems stock outstanding and entitled to vote at the Applied Biosystems special meeting of stockholders, held by approximately 4,792 holders of record. Each holder of Applied Biosystems stock is entitled to one vote for each share of Applied Biosystems stock owned as of the record date.

A complete list of Applied Biosystems stockholders will be available for review at the Applied Biosystems special meeting of stockholders and at the executive offices of ABI during regular business hours for a period of ten days before the special meeting.

Information Concerning Solicitation and Voting

Quorum and Vote Required

ABI needs a quorum to transact business at the Applied Biosystems special meeting of stockholders. This means that at least a majority of the total votes entitled to be cast by the outstanding shares of Applied

Table of Contents

Biosystems stock must be present at the Applied Biosystems special meeting of stockholders, either in person or by proxy. Abstentions and broker non-votes, which are described below, are counted as present and entitled to vote for purposes of determining whether a quorum exists. If a quorum is not present, ABI expects that the Applied Biosystems special meeting of stockholders will be adjourned or postponed to solicit additional proxies. At any subsequent reconvening of the Applied Biosystems special meeting of stockholders, all proxies will be voted in the same manner as the proxies would have been voted at the original convening of the special meeting, except for any proxies that have been effectively revoked or withdrawn prior to the subsequent meeting.

For the merger agreement to be adopted and the merger approved the holders of at least a majority of the outstanding shares of Applied Biosystems stock entitled to vote on the proposal at the Applied Biosystems special meeting of stockholders must vote in favor of adoption of the merger agreement and approval of the merger.

In accordance with the DGCL and ABI's bylaws, approval of the proposal to authorize the adjournment or postponement of the Applied Biosystems special meeting of stockholders, if necessary, to permit further solicitation of proxies requires the affirmative vote of the holders of a majority of the shares of Applied Biosystems stock present in person or represented by proxy at the special meeting and entitled to vote thereon.

Voting by ABI's Directors and Executive Officers

As of the record date for the Applied Biosystems special meeting of stockholders, the directors and executive officers of ABI as a group owned and were entitled to vote approximately 858,985 shares of Applied Biosystems stock, or approximately 0.5% of the outstanding shares of Applied Biosystems on that date.

Voting; Proxies

If you are a stockholder of record (that is, if you hold shares of Applied Biosystems stock in your own name in Applied Biosystems stock records maintained by ABI's transfer agent, Computershare Trust Company, N.A.), you have four ways to vote. You may:

Sign, date and return the enclosed proxy card in the enclosed postage-paid envelop;

Vote over the internet by following the instructions on the proxy card;

Vote by telephone by following the instructions on the proxy card; or

Vote in person by attending the Applied Biosystems special meeting of stockholders.

The shares represented by a properly signed proxy card or voted over the internet or by telephone will be voted at the Applied Biosystems special meeting of stockholders as specified by the stockholder. If a proxy card is properly signed and returned but no specific choices are made, the shares represented by the proxy card will be voted for each of the proposals set forth on the proxy card.

If you are a street name stockholder (that is, if you hold shares of Applied Biosystems stock through a bank, broker, or other nominee), you are considered the beneficial owner of the shares, and these proxy materials, together with a voting instruction form, are being forwarded to you by your bank, broker, or other nominee. As a beneficial owner, you must instruct your bank, broker, or other nominee how to vote. Depending on your bank, broker, or other nominee, you may be able to vote by toll-free telephone or over the internet. Please refer to the enclosed voting form for instructions on how to vote electronically. You may also vote by signing, dating, and returning the enclosed voting form. Because a beneficial owner is not the stockholder of record, if you wish to vote your shares in person at the Applied Biosystems special meeting of stockholders, you must first obtain a legal proxy from the bank, broker, or other nominee that holds your shares, giving you the right to vote the shares at the special meeting.

Table of Contents

Revocation of Proxy

If you are a stockholder of record, you may revoke a proxy, including a vote over the internet or by telephone, at any time before it is voted at the Applied Biosystems special meeting of stockholders by:

Submitting a properly completed proxy with a later date or voting by telephone or over the internet at a later time;

Attending the Applied Biosystems special meeting of stockholders and voting in person, although attendance at the special meeting will not in and of itself constitute revocation of a proxy; or

Delivering written notice of revocation to the Secretary of ABI.

If you are a street name stockholder and you wish to revoke a proxy, you must submit a later-dated proxy to your bank, broker, or other nominee. You may also revoke a proxy at any time prior to exercise by attending the Applied Biosystems special meeting of stockholders and voting in person, although attendance at the special meeting will not in and of itself constitute revocation of a proxy. However, because a beneficial owner is not the stockholder of record, if you wish to vote your shares in person at the Applied Biosystems special meeting of stockholders, you must first obtain a legal proxy from the bank, broker, or other nominee that holds your shares, giving you the right to vote the shares at the special meeting.

Written notices of revocation and other communications with respect to the revocation of proxies should be addressed to:

Applied Biosystems Inc.

301 Merritt 7

Norwalk, Connecticut 06851

Attn: Corporate Secretary

Abstentions and Broker Non-Votes

For purposes of the proposal to adopt the merger agreement and approve the merger and the proposal to authorize the adjournment of the Applied Biosystems special meeting of stockholders, abstentions will have the same effect as voting against the proposals.

Under the listing requirements of the NYSE, brokers who hold shares of Applied Biosystems stock in street name for a beneficial owner of those shares typically have the authority to vote in their discretion on routine proposals that do not affect substantially the rights or privileges of such stock when they have not received instructions from beneficial owners. However, brokers are not allowed to exercise their voting discretion with respect to the approval of matters that the NYSE determines to be non-routine, such as adoption of the merger agreement and approval of the merger, without specific instructions from the beneficial owner. Broker non-votes are shares held by a broker or other nominee that are represented at the Applied Biosystems special meeting of stockholders, but with respect to which the broker or nominee is not instructed by the beneficial owner of such shares to vote on the particular proposal and the broker does not have discretionary voting power on such proposal. If your broker holds your Applied Biosystems stock in street name, your broker will vote your shares only if you provide instructions on how to vote by filling out the voter instruction form sent to you by your broker with this joint proxy statement/prospectus. Broker non-votes will have no effect on the proposal to adjourn the special meeting.

Proxy Solicitation

ABI is soliciting proxies for the Applied Biosystems special meeting of stockholders from Applied Biosystems stockholders. ABI will bear the entire cost of soliciting proxies from Applied Biosystems

Table of Contents

stockholders, except that Invitrogen and ABI have each agreed to share equally all expenses incurred in connection with the printing of this joint proxy statement/prospectus and related proxy materials. In addition to the solicitation of proxies by mail, ABI will request that brokers, banks and other nominees send proxies and proxy materials to the beneficial owners of Applied Biosystems stock held by them and secure their voting instructions, if necessary. ABI will reimburse those record holders for their reasonable expenses. ABI has also made arrangements with Morrow & Co., LLC to assist it in soliciting proxies, and has agreed to pay a fee of approximately \$15,000 plus expenses for those services. ABI also may use several of its regular employees, who will not be specially compensated, to solicit proxies from Applied Biosystems stockholders, either personally or by telephone, internet, telegram, facsimile or special delivery letter.

Adjournments

An adjournment may be made from time to time by approval of the holders of shares representing a majority of the votes present in person or by proxy at the Applied Biosystems special meeting of stockholders, whether or not a quorum exists, without further notice other than by an announcement made at the special meeting.

Assistance

If you need assistance in completing your proxy card or have questions regarding the Applied Biosystems special meeting of stockholders, please contact Morrow & Co., LLC, which is assisting ABI with the solicitation of proxies, at (800) 607-0088 or via e-mail to abi.info@morrowco.com. Alternatively, you may contact ABI's Corporate Secretary at (203) 840.2000 or write to Applied Biosystems Inc., 301 Merritt 7, Norwalk, Connecticut 06851, Attn: Corporate Secretary.

Table of Contents**COMPARISON OF STOCKHOLDER RIGHTS AND CORPORATE GOVERNANCE MATTERS**

Invitrogen is a corporation incorporated under the laws of the State of Delaware. ABI is also a corporation incorporated under the laws of the State of Delaware. After the completion of the transaction, holders of Applied Biosystems stock will become stockholders of Invitrogen, and will become subject to the Restated Certificate of Incorporation of Invitrogen, as amended, and the Bylaws of Invitrogen, as amended.

While there are substantial similarities between the charters and bylaws of Invitrogen and ABI, a number of differences do exist. The following is a summary of the material differences between the rights of Invitrogen stockholders and the rights of Applied Biosystems stockholders. While Invitrogen and ABI believe that this summary covers the material differences between the two, this summary may not contain all of the information that is important to you. This summary is not intended to be a complete discussion of the respective rights of Invitrogen and Applied Biosystems stockholders and it is qualified in its entirety by reference to Delaware law, and the various documents of Invitrogen and ABI referenced in this summary. You should carefully read this entire joint proxy statement/prospectus and the other documents referenced in this joint proxy statement/prospectus for a more complete understanding of the differences between being a stockholder of Invitrogen and being a stockholder of Applied Biosystems. Invitrogen and ABI have filed with the SEC their respective documents referred to herein and will send copies of these documents to you upon your request. See the section entitled *Additional Information Where You Can Find More Information*.

| | Invitrogen | ABI |
|---------------------------------|--|--|
| <i>Authorized Capital Stock</i> | The authorized capital stock of Invitrogen consists of 200,000,000 (400,000,000 if the proposed amendment is approved) shares of common stock, par value of \$0.01 per share, and 6,405,884 shares of preferred stock, par value \$0.01 per share, of which 2,202,942 shares are designated as Series A Convertible Redeemable Preferred Stock, 2,202,942 shares are designated as Redeemable Preferred Stock, and 1,000,000 shares are designated as Series B Preferred Stock. No shares of preferred stock are issued and outstanding. | The authorized capital stock of ABI consists of 1,000,000,000 shares of a class of common stock designated as <i>Applera Corporation-Applied Biosystems Group Common Stock</i> , par value \$0.01 per share, or <i>Applied Biosystems stock</i> , 225,000,000 shares of a class of common stock designated as <i>Applera Corporation-Celera Group common stock</i> , par value \$0.01 per share, and 10,000,000 shares of preferred stock, par value \$0.01 per share. No shares of <i>Applera Corporation-Celera Group common stock</i> are outstanding, and no shares of preferred stock are issued and outstanding. |
| <i>Number of Directors</i> | Delaware law provides that a corporation must have at least one director and that the number of directors shall be fixed by, or in the manner provided in, the bylaws unless the restated certificate of incorporation fixes the number of directors. Invitrogen's restated certificate of incorporation provides that the authorized number of directors shall be fixed by resolution of the board of directors. Invitrogen's bylaws provide that the authorized number of directors shall be from five to twelve, with the | Delaware law provides that a corporation must have at least one director and that the number of directors shall be fixed by, or in the manner provided in, the bylaws unless the certificate of incorporation fixes the number of directors. ABI's certificate of incorporation provides that the authorized number of directors shall be from three to thirteen, with the exact number to be set by resolution of the board of directors. The current number of directors of ABI is fixed at nine. |

Table of Contents

| | Invitrogen | ABI |
|---|--|---|
| | <p>exact number to be set by resolution of the board of directors. The current number of directors of Invitrogen is fixed at nine. At the effective time of the merger, the board of directors of Invitrogen will cause the number of directors to be increased from nine to twelve.</p> | |
| <i>Cumulative Voting</i> | <p>Delaware law allows a corporation's certificate of incorporation to permit stockholders to cumulate their votes at elections of directors.</p> | <p>Delaware law allows a corporation's certificate of incorporation to permit stockholders to cumulate their votes at elections of directors.</p> |
| | <p>However, the restated certificate of incorporation of Invitrogen does not provide for cumulative voting and, accordingly, holders of Invitrogen common stock have no cumulative voting rights in connection with the election of directors.</p> | <p>However, the certificate of incorporation of ABI does not provide for cumulative voting and, accordingly, holders of Applied Biosystems stock have no cumulative voting rights in connection with the election of directors.</p> |
| <i>Classification of Board of Directors</i> | <p>Delaware law permits, but does not require, a classified board of directors, divided into as many as three classes with staggered terms under which one-half or one-third of the directors are elected to terms of two or three years, as applicable.</p> | <p>Delaware law permits, but does not require, a classified board of directors, divided into as many as three classes with staggered terms under which one-half or one-third of the directors are elected to terms of two or three years, as applicable.</p> |
| | <p>Invitrogen's restated certificate of incorporation provides that the board of directors shall be divided into three classes that serve staggered terms of three years each from the time of the director's election until the third succeeding annual meeting of the stockholders.</p> | <p>ABI's certificate of incorporation does not provide for a classified board of directors.</p> |
| <i>Removal of Directors</i> | <p>Under Delaware law, directors may be removed from office, with or without cause, by a majority stockholder vote, though in the case of a corporation whose board of directors is classified, stockholders may effect such removal only for cause, unless otherwise provided in the restated certificate of incorporation.</p> | <p>Under Delaware law, directors may be removed from office, with or without cause, by a majority stockholder vote, though in the case of a corporation whose board of directors is classified, stockholders may effect such removal only for cause, unless otherwise provided in the certificate of incorporation. ABI's board of directors is not classified.</p> |
| | <p>Invitrogen's restated certificate of incorporation and bylaws provide that directors may be removed from office only with cause by a majority stockholder vote.</p> | <p>Under ABI's bylaws, directors may be removed from office, with or without cause, by a majority stockholder vote.</p> |

Table of Contents

| | Invitrogen | ABI |
|--|--|--|
| <i>Vacancies on the Board of Directors</i> | Delaware law provides that vacancies on a corporation's board of directors, including those caused by an increase in the number of directors, may be filled by a majority of the remaining directors, though less than a quorum, or by a sole remaining director, unless the certificate of incorporation or bylaws provides otherwise. | Delaware law provides that vacancies on a corporation's board of directors, including those caused by an increase in the number of directors, may be filled by a majority of the remaining directors, though less than a quorum, or by a sole remaining director, unless the certificate of incorporation or bylaws provides otherwise. |
| | Invitrogen's bylaws provide that newly created directorships resulting from any increase in the authorized number of directors or any vacancy resulting from death, resignation, retirement, disqualification or other cause (other than removal by stockholder vote) may be filled by a majority vote of the directors then in office, even if less than a quorum. | ABI's bylaws provide that newly created directorships resulting from an increase in the authorized number of directors or any vacancy resulting from death, resignation or removal may be filled by a majority vote of the directors then in office, even though less than a majority of the entire board of directors. |
| | Vacancies resulting from removal by stockholder vote may be filled by a majority vote of the directors then in office, even if less than a quorum, or by a majority of the stockholders at a special meeting of the stockholders called for that purpose. | Vacancies resulting from removal by stockholder vote may be filled by a majority of the stockholders at the special meeting at which such vacancy was created. |
| <i>Stockholder Action by Written Consent</i> | Delaware law provides that unless otherwise provided in a corporation's certificate of incorporation or bylaws, any action required or permitted to be taken at a meeting of stockholders may be taken without a meeting and without prior notice if a written consent to the action is signed by stockholders holding the minimum number of votes that would be necessary to take such action at a meeting. | Delaware law provides that unless otherwise provided in a corporation's certificate of incorporation or bylaws, any action required or permitted to be taken at a meeting of stockholders may be taken without a meeting and without prior notice if a written consent to the action is signed by stockholders holding the minimum number of votes that would be necessary to take such action at a meeting. |
| | Invitrogen's restated certificate of incorporation provides that stockholder action may not be taken by written consent. | ABI's certificate of incorporation provides that stockholder action may be taken by written consent only if authorized by the written consent of stockholders holding 100% of the capital stock entitled to vote thereon. |
| <i>Amendment of the Articles or Certificate of Incorporation</i> | Under Delaware law, a corporation's certificate of incorporation may be amended by the affirmative vote of the holders of a majority of the outstanding stock entitled to vote and a majority of each class of stock entitled to vote. | Under Delaware law, a corporation's certificate of incorporation may be amended by the affirmative vote of the holders of a majority of the outstanding stock entitled to vote and a majority of each class of stock entitled to vote. |

Table of Contents

| | Invitrogen | ABI |
|--|--|---|
| <i>Amendment of Bylaws</i> | <p>Invitrogen's restated certificate of incorporation does not modify the Delaware standard requiring majority stockholder approval to amend the restated certificate of incorporation, except that the affirmative vote of at least 66-2/3% of the voting power of all the outstanding capital stock entitled to vote generally in the election of directors, voting together as a single class, is required to amend or repeal Article V, Article VI, Article VIII, or Article IX of the restated certificate of incorporation.</p> <p>Delaware law provides that a corporation's stockholders entitled to vote have the power to adopt, amend or repeal bylaws, although the corporation's certificate of incorporation may give the board of directors the power to adopt, amend or repeal bylaws as well.</p> | <p>Amendment of ABI's certificate of incorporation requires approval of both a majority of the members of the board of directors then in office and a majority of the voting power of all of the capital stock entitled to vote generally in the election of directors, voting together as a single class.</p> <p>Delaware law provides that a corporation's stockholders entitled to vote have the power to adopt, amend or repeal bylaws, although the corporation's certificate of incorporation may give the board of directors the power to adopt, amend or repeal bylaws as well.</p> |
| <i>Special Meeting of Stockholders</i> | <p>Invitrogen's bylaws provide that the affirmative vote of at least 66-2/3% of the voting power of all the outstanding capital stock entitled to vote generally in the election of directors, voting together as a single class, or a vote of at least 66-2/3% of the number of directors then authorized, is required to amend the bylaws.</p> <p>Under Delaware law, special meetings of the stockholders may be called by the board of directors or by such person or persons as may be authorized by the certificate of incorporation or by the bylaws.</p> | <p>ABI's bylaws provide that the bylaws may be amended, repealed, or new bylaws may be adopted by the stockholders entitled to vote in the election of directors, or by a majority of the members of the board of directors then in office, provided that the proposed action in respect thereof shall be stated in the notice of such meeting.</p> <p>Under Delaware law, special meetings of the stockholders may be called by the board of directors or by such person or persons as may be authorized by the certificate of incorporation or by the bylaws.</p> |
| <i>Notice of Stockholder Meetings</i> | <p>Invitrogen's bylaws provide that special meetings of the stockholders may be called at any time by a resolution adopted by a majority of the total number of authorized directors, the chairman of the board of directors, or the president.</p> <p>Under Delaware law and Invitrogen's bylaws, written notice of any meeting of the stockholders must be given to</p> | <p>ABI's bylaws provide that special meetings of the stockholders may be called at any time by the board of directors, the chairman of the board of directors, the president, or the secretary.</p> <p>Under Delaware law and ABI's bylaws, written notice of any meeting of the stockholders must be given to</p> |

Table of Contents

| | Invitrogen | ABI |
|--|--|---|
| | <p>each stockholder entitled to vote at the meeting not less than 10 nor more than 60 days before the date of the meeting and shall specify the place, if any, date, and hour of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and voting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called.</p> | <p>each stockholder entitled to vote at the meeting not less than 10 nor more than 60 days before the date of the meeting and shall specify the place, if any, date, and hour of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and voting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called, and indicate that it is being issued at the direction of the person(s) calling the meeting.</p> |
| <i>Delivery and Notice Requirements of Stockholder Nominations and Proposals</i> | <p>Invitrogen's bylaws provide that for a stockholder proposal to be brought properly before a meeting, the stockholder must timely notify the corporation's secretary. To be timely, the notice must be received no later than the date required under the Securities Exchange Act of 1934, as amended.</p> <p>Invitrogen's bylaws also provide that a stockholder may nominate a person for election as a director by giving written notice to the secretary of the corporation not less than 120 nor more than 50 days prior to the date the proxy was released to stockholders in connection with the previous year's annual meeting. However, if the date of the annual meeting has changed by more than 30 days from the date contemplated by the previous annual meeting, or if the date of the annual meeting has been changed by more than 30 calendar days from the date contemplated at the time of the previous year's proxy statement, or if the director is to be elected at a special meeting, notice must be received not later than the 10th day following the day on which notice of the date of special meeting was mailed or public disclosure was made.</p> | <p>ABI's bylaws provide that for a stockholder proposal to be brought properly before an annual meeting or for a stockholder to nominate a director for election, the stockholder must notify the secretary of ABI in writing not less than 90 days nor more than 120 days prior to the first anniversary of the date of the preceding year's annual meeting. However, if the date of the annual meeting is advanced or delayed by more than 30 days of the preceding year's annual meeting, notice must be delivered not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the first public announcement of the date of such meeting. Additionally, if the stockholder has provided ABI with a Solicitation Notice (as defined in the bylaws), the stockholder must have delivered a proxy statement to holders of at least a percentage of voting shares sufficient to carry such proposal, or, in the case of nominations for director, to holders of a percentage of voting shares reasonably believed to be sufficient to elect the nominee.</p> <p>With regard to a special meeting of the stockholders, only business brought before the meeting pursuant to ABI's notice of meeting shall be conducted. Nominations for directors may be</p> |

Table of Contents

| | Invitrogen | ABI |
|--------------------------|--|--|
| <i>Proxy</i> | <p>Under Delaware law, at any meeting of the stockholders of Invitrogen, a stockholder may designate another person to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period.</p> | <p>made at a special meeting only by or at the direction of the board of directors, or by a stockholder if written notice is delivered to the secretary not later than the 90th day prior to the special meeting of the 10th day following the first public announcement of the date of such meeting.</p> <p>Under Delaware law, at any meeting of the stockholders of Applied Biosystems, a stockholder may designate another person to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period.</p> |
| | <p>Invitrogen's bylaws provide that every stockholder entitled to vote may vote by proxy authorized by a written instrument filed in accordance with the procedure established for the meeting.</p> | <p>Pursuant to ABI's bylaws, at any meeting of the stockholders of Applied Biosystems, a stockholder may designate another person to act for such stockholder by proxy signed by such stockholder. Proxies shall be delivered to the secretary of the meeting prior to the time designated for such meeting.</p> |
| <i>Preemptive Rights</i> | <p>Under Delaware law, absent express provision in a corporation's certificate of incorporation, a stockholder does not, by operation of law, possess preemptive rights to subscribe to additional issuances of the corporation's stock.</p> | <p>Under Delaware law, absent express provision in a corporation's certificate of incorporation, a stockholder does not, by operation of law, possess preemptive rights to subscribe to additional issuances of the corporation's stock.</p> |
| <i>Dividends</i> | <p>Invitrogen's restated certificate of incorporation does not provide that stockholders possess any preemptive right to subscribe to additional issuances of its capital stock.</p> <p>Under Delaware law, a corporation may pay dividends out of its surplus or net profits for the current or preceding fiscal year, provided that the capital of the corporation is not less than the aggregate amount of the capital represented by the corporation's outstanding stock of all classes having a preference upon distribution of assets.</p> | <p>ABI's certificate of incorporation does not provide that stockholders possess any preemptive right to subscribe to additional issuances of its capital stock.</p> <p>Under Delaware law, a corporation may pay dividends out of its surplus or net profits for the current or preceding fiscal year, provided that the capital of the corporation is not less than the aggregate amount of the capital represented by the corporation's outstanding stock of all classes having a preference upon distribution of assets.</p> |

Table of Contents

| | Invitrogen | ABI |
|--|--|---|
| | <p>Invitrogen may pay dividends on its common stock as determined by the board of directors. Holders of Convertible Preferred Stock and Redeemable Preferred Stock are entitled to receive cumulative dividends and holders of Series B Preferred Stock are entitled to receive quarterly dividends, as specified in the restated certificate of incorporation.</p> | <p>ABI may pay dividends on its common stock.</p> |
| <i>Indemnification of Directors and Officers</i> | <p>Invitrogen's restated certificate of incorporation provides that a director will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director except for liability (i) for any breach of duty of loyalty to Invitrogen or its stockholders, (ii) for acts of omissions not in good faith or which involve intentional misconduct or knowing violation of the law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.</p> | <p>ABI's certificate of incorporation provides that a director will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director except for liability (i) for any breach of duty of loyalty to ABI or its stockholders, (ii) for acts of omissions not in good faith or which involve intentional misconduct or knowing violation of the law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.</p> |
| | <p>Invitrogen's bylaws provide that the corporation will indemnify, to the fullest extent permitted by the DGCL, any director, officer, employee and agent against expenses, liabilities and loss reasonably incurred or suffered by reason of the fact that such person is or was a director or officer of Invitrogen.</p> | <p>ABI's bylaws provide that the corporation will indemnify, to the fullest extent permitted by the DGCL, any director, officer, employee and agent against expenses, liabilities and loss reasonably incurred or suffered by reason of the fact that such person is or was a director or officer of ABI.</p> |
| | <p>The board of directors is authorized to enter into indemnification contracts with any director or officer and to maintain insurance to protect itself and its directors and officers, regardless of whether Invitrogen would have the power to indemnify such person against such expense under the DGCL.</p> | <p>The board of directors is authorized to enter into indemnification contracts with any director or officer and to maintain insurance to protect itself and its directors and officers, regardless of whether ABI would have the power to indemnify such person against such expense under the DGCL.</p> |
| <i>Stockholder Rights Plan</i> | <p>Invitrogen adopted a Rights Agreement in February 2001. In connection with the Rights Agreement, Invitrogen's board of directors declared and paid a dividend of one preferred share purchase right for each share of common stock outstanding on March 30, 2001. Each right entitles the</p> | <p>ABI adopted a Rights Agreement in April 1999. In connection with the Rights Agreement, ABI's board of directors issued participating preferred stock purchase rights (the "Rights") to all holders of Applera Corporation Celera Group common stock and Applied Biosystems stock. No Applera</p> |

Table of Contents

Invitrogen

holder, under certain circumstances, to purchase from Invitrogen one one-hundredth of a share of Series B Participating Preferred Stock, par value \$0.01 per share, at a price of \$250 per one one-hundredth of a share of Series B Preferred Stock, subject to adjustment.

Initially, the rights are attached to outstanding certificates representing common stock, and no separate certificates representing the rights are distributed. The rights will separate from the common stock, be represented by separate certificates and will become exercisable upon the earlier of:

ten days following a public announcement or disclosure that a person or group has acquired beneficial ownership of 15% or more of the outstanding common stock; or

ten business days after someone announces they intend to commence a tender offer or exchange offer for 15% or more of the outstanding common stock.

If the rights become exercisable, each right (other than rights held by an acquiring party) will entitle the holder to purchase, at a price equal to the exercise price of the right, a number of shares of Invitrogen's common stock having a then-current value of twice the exercise price of the right. If, after the rights become exercisable, Invitrogen agrees to merge into another entity or sell more than 50% of its assets, each right (other than rights held by an acquiring party) will entitle the holder to purchase, at a price equal to the exercise price of the right, a number of shares of common stock of such entity having a then-current value of twice the exercise price.

Invitrogen may exchange the rights at a ratio of one share of common stock for each right (other than rights held by

ABI

Corporation Celera Group rights are currently outstanding. Each existing right entitles the holder to purchase shares of participating junior preferred stock as follows:

one right for every four shares of Applied Biosystems stock (an Applied Biosystems Right), which will allow holders to purchase shares of Series A participating junior preferred stock of Applied Biosystems if a distribution date occurs; and

A distribution date will occur upon the earlier of:

the tenth day after a public announcement that a person or group of affiliated or associated persons other than ABI or ABI's employee benefit plans (an acquiring person) has acquired beneficial ownership of 15% or more of the shares of Applied Biosystems stock then outst