

IMAGE SENSING SYSTEMS INC  
Form DEF 14A  
April 28, 2011  
Table of Contents

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549

**SCHEDULE 14A**  
**(Rule 14a-101)**  
**INFORMATION REQUIRED IN PROXY STATEMENT**  
**SCHEDULE 14A INFORMATION**  
**Proxy Statement Pursuant to Section 14(a) of the Securities**  
**Exchange Act of 1934 (Amendment No. )**

Filed by the Registrant  x  
Filed by a Party other than the Registrant  o  
Check the appropriate box:

- o Preliminary Proxy Statement
- o **Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- x Definitive Proxy Statement
- o Definitive Additional Materials
- o Soliciting Material Pursuant to § 240.14a-12

**Image Sensing Systems, Inc.**  
(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- x No fee required
- o Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

- (1) Title of each class of securities to which transaction applies:
- (2) Aggregate number of securities to which transaction applies:
- (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
- (4) Proposed maximum aggregate value of transaction:
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- o Fee paid previously with preliminary materials.

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(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

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Table of Contents

**Image Sensing Systems, Inc.**

500 Spruce Tree Centre  
1600 University Avenue West  
St. Paul, Minnesota 55104  
(651) 603-7700

April 28, 2011

Dear Shareholder:

You are cordially invited to attend the annual meeting of shareholders of Image Sensing Systems, Inc. to be held at the Embassy Suites, 175 East 10<sup>th</sup> St., St. Paul, Minnesota, on Wednesday, May 25, 2010 at 3:30 p.m. Central Time.

At the meeting you will be asked to vote for the election of our Board of Directors and to ratify the selection of Grant Thornton LLP as our independent registered public accounting firm for 2011. I encourage you to vote for each of the director nominees and for ratification of the appointment of Grant Thornton LLP.

Whether or not you are able to attend the meeting in person, I urge you to sign and date the enclosed proxy and return it promptly in the enclosed envelope. Changes in regulations effective in 2010 eliminated the ability of your bank or broker to vote your uninstructed shares on certain matters, including the election of directors, so it is important that you vote and return your proxy.

Very truly yours,

**Image Sensing Systems, Inc.**

James Murdakes  
Chairman

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Table of Contents

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Table of Contents

**Image Sensing Systems, Inc.**

**500 Spruce Tree Centre  
1600 University Avenue West  
St. Paul, Minnesota 55104**

**NOTICE OF ANNUAL MEETING OF SHAREHOLDERS  
TO BE HELD ON MAY 25, 2011**

TO THE SHAREHOLDERS OF IMAGE SENSING SYSTEMS, INC.:

NOTICE IS HEREBY GIVEN that the annual meeting of shareholders of Image Sensing Systems, Inc. will be held at 3:30 p.m. Central Time on Wednesday, May 25, 2011, at the Embassy Suites, 175 East 10th St., St. Paul, Minnesota, for the following purposes:

1. To elect seven directors to serve on our Board of Directors.
2. To ratify the appointment of Grant Thornton LLP as our independent registered public accounting firm for the 2011 fiscal year.
3. To transact such other business as may properly come before the meeting.

The Board of Directors has fixed the close of business on March 28, 2011 as the record date for the determination of shareholders entitled to notice of and to vote at the meeting.

We encourage you to take part in the affairs of our company either in person or by executing and returning the enclosed proxy card as promptly as possible. To ensure that your shares are represented, we request that you sign and return your proxy card whether or not you plan to attend the meeting.

BY ORDER OF THE BOARD OF DIRECTORS,

Gregory R. L. Smith  
*Chief Financial Officer, Treasurer and Secretary*

Dated: April 28, 2011

**We urge you to mark, sign and date the enclosed proxy and promptly mail it in the enclosed envelope,  
which requires no postage if mailed in the United States.**

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS  
FOR THE  
ANNUAL MEETING OF SHAREHOLDERS TO BE HELD ON MAY 25, 2011**

This notice, the accompanying proxy statement and the Image Sensing Systems, Inc. 2010 Annual Report to Shareholders, which includes the Image Sensing Systems, Inc. Annual Report on Form 10-K for the year ended December 31, 2010, are available at <http://www.imagesensingsystems.com>.

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Table of Contents

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PROXY STATEMENT

TABLE OF CONTENTS

|  |    |
|--|----|
| <u>QUESTIONS AND ANSWERS ABOUT THE ANNUAL MEETING AND VOTING</u>   | 1  |
| <u>What is the purpose of the meeting?</u>   | 1  |
| <u>Who is entitled to vote at the meeting?</u>   | 1  |
| <u>What are my voting rights?</u>  | 1  |
| <u>How many shares must be present to hold the meeting?</u>  | 1  |
| <u>How do I vote my shares?</u>  | 1  |
| <u>Can I vote my shares in person at the meeting?</u>  | 1  |
| <u>What vote is required for the election of directors or for a proposal to be approved?</u>                     | 2  |
| <u>How are votes counted?</u>  | 2  |
| <u>What is the difference between a shareholder of record and a shareholder who holds stock in street name ?</u> | 2  |
| <u>What is a broker non-vote?</u>  | 2  |
| <u>What is the effect of not casting my vote?</u>  | 3  |
| <u>How does the Board of Directors recommend that I vote?</u>  | 3  |
| <u>What if I do not specify how I want my shares voted?</u>  | 3  |
| <u>Can I change my vote after submitting my proxy or voting instructions?</u>                                    | 3  |
| <u>Who pays for the cost of proxy preparation and solicitation?</u>  | 4  |
| <u>How can I communicate with the Board of Directors?</u>  | 4  |
| <u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u>  | 5  |
| <u>SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE</u>   | 6  |
| <u>PROPOSAL 1 - ELECTION OF DIRECTORS</u>  | 7  |
| <u>CORPORATE GOVERNANCE</u>  | 10 |
| <u>Board Composition and Meetings</u>  | 10 |
| <u>Board Leadership Structure</u>  | 10 |
| <u>Risk Oversight</u>  | 10 |
| <u>Board Committees</u>  | 11 |
| <u>Compensation Committee Interlocks and Insider Participation</u>   | 12 |
| <u>Executive Sessions of the Board</u>   | 12 |
| <u>Board Nomination Process</u>  | 12 |
| <u>Policy Regarding Attendance at Annual Meetings</u>  | 12 |
| <u>Non-Employee Director Compensation</u>  | 12 |
| <u>EXECUTIVE COMPENSATION</u>  | 13 |
| <u>Compensation Discussion and Analysis</u>  | 13 |
| <u>Compensation and Stock Option Committee Report on Executive Compensation</u>                                  | 17 |
| <u>Summary Compensation Table 2010 and 2009</u>  | 17 |
| <u>Grants of Plan-Based Awards 2010</u>  | 18 |
| <u>Outstanding Equity Awards at Fiscal Year-End 2010</u>   | 18 |
| <u>Option Exercises and Stock Vested 2010</u>  | 19 |
| <u>Stock Options</u>   | 19 |
| <u>Employment Agreements</u>   | 20 |
| <u>Potential Payments upon Termination of Employment or Change in Control</u>                                    | 21 |
| <u>RELATED PERSON TRANSACTIONS AND POLICY</u>  | 22 |
| <u>Related Person Transactions</u>   | 22 |
| <u>Related Person Transaction Policy</u>   | 22 |

|   |    |
|---|----|
| <u>AUDIT COMMITTEE REPORT</u>   | 23 |
| <u>PAYMENT OF FEES TO OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>   | 24 |
| <u>Audit Fees</u>   | 24 |
| <u>Audit-Related Fees</u>   | 24 |
| <u>Tax Fees</u>   | 24 |
| <u>All Other Fees</u>   | 24 |
| <u>Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services Provided by Our Independent Registered Public Accounting Firm</u> | 24 |
| <u>PROPOSAL 2 RATIFICATION OF APPOINTMENT OF OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>  | 25 |
| <u>SHAREHOLDER PROPOSALS FOR THE 2012 ANNUAL MEETING</u>  | 25 |
| <u>ANNUAL REPORT TO SHAREHOLDERS</u>  | 25 |
| <u>OTHER MATTERS</u>  | 25 |



Table of Contents

**PROXY STATEMENT**

**2011 ANNUAL MEETING OF SHAREHOLDERS  
TO BE HELD ON MAY 25, 2011**

The Board of Directors of Image Sensing Systems, Inc. (the Company) is soliciting proxies for use at our annual meeting of shareholders to be held on May 25, 2011, and at any adjournment of the meeting. This proxy statement and the enclosed proxy card are first being mailed or given to shareholders on or about April 28, 2011.

**QUESTIONS AND ANSWERS ABOUT THE ANNUAL MEETING AND VOTING**

**What is the purpose of the meeting?**

At our annual meeting, shareholders will act upon the matters described in the Notice of Annual Meeting of Shareholders. These consist of the election of directors and the ratification of the appointment of our independent registered public accounting firm. Also, management will report on our performance during the last fiscal year and respond to questions from shareholders.

**Who is entitled to vote at the meeting?**

The Board of Directors has set March 28, 2011 as the record date for the annual meeting. If you were a shareholder of record at the close of business on March 28, 2011, you are entitled to notice of and to vote at the annual meeting.

As of the record date, 4,880,819 shares of common stock, par value \$.01 per share, were issued and outstanding and, therefore, eligible to vote at the annual meeting.

**What are my voting rights?**

Holders of our common stock are entitled to one vote per share. Therefore, a total of 4,880,819 votes are entitled to be cast at the meeting. There is no cumulative voting for directors.

**How many shares must be present to hold the meeting?**

In accordance with our bylaws, shares equal to at least a majority of the voting power of the outstanding shares of our common stock as of the record date must be present at the meeting in order to hold the meeting and conduct business. This is called a quorum. Shares are counted as present at the meeting if:

you are present and vote them in person at the meeting; or

you have properly submitted a proxy by mail.

**How do I vote my shares?**

If you are a shareholder of record, you can give a proxy to be voted at the meeting by completing, signing and mailing the enclosed proxy card. If you properly execute, duly return and do not revoke your proxy, it will be voted in the manner you specify.

**Can I vote my shares in person at the meeting?**

If you are a shareholder of record, you may vote your shares in person at the meeting by completing a ballot at the meeting. Even if you currently plan to attend the meeting, we recommend that you also submit your proxy as described above so that your vote will be counted if you later decide not to attend the meeting.

Table of Contents

**What vote is required for the election of directors or for a proposal to be approved?**

In accordance with Minnesota law, if a quorum is present, the nominees for election as directors will be elected by a plurality of the votes cast at the annual meeting. This means that because shareholders will be electing seven directors, the seven nominees receiving the highest number of votes will be elected. The affirmative vote of a majority of the shares of our common stock present in person or by proxy and entitled to vote at the annual meeting is required to approve the other proposal (provided that a quorum is present at the meeting).

**How are votes counted?**

You may either vote **FOR** or **WITHHOLD AUTHORITY** to vote for each nominee for the Board of Directors. You may vote **FOR**, **AGAINST** or **ABSTAIN** on the other proposal.

If you submit your proxy but abstain from voting or withhold authority to vote on one or more matters, your shares will be counted as present at the meeting for the purpose of determining a quorum. Your shares also will be counted as present at the meeting for the purpose of calculating the vote on the particular matter with respect to which you abstained from voting or withheld authority to vote.

If you withhold authority to vote for one or more of the directors, this has no effect on the election of those directors. If you abstain from voting on a proposal, your abstention has the same effect as a vote against that proposal.

If you hold your shares in **street name** and do not provide voting instructions to your broker, your shares will be considered to be **broker non-votes** and will not be voted on any proposal on which your broker does not have discretionary authority to vote. Shares that constitute broker non-votes will be counted as present at the meeting for the purpose of determining a quorum but will not be represented at the meeting for purposes of calculating the vote with respect to such matter or matters. This effectively reduces the number of shares needed to approve such matter or matters.

**What is the difference between a **shareholder of record** and a **shareholder who holds stock in street name** ?**

If you hold our shares directly in your name with our transfer agent, Continental Transfer and Trust Company, you are a **shareholder of record** (also known as a **registered shareholder** ). The Notice of Annual Meeting, Proxy Statement, 2010 Annual Report to Shareholders, and proxy card have been sent directly to you by us or our representative.

If you own your shares indirectly through a broker, bank, or other financial institution, your shares are said to be held in **street name**. Technically, the bank or broker is the shareholder of record with respect to those shares. In this case, the Notice of Annual Meeting, Proxy Statement, Annual Report to Shareholders, and a voting instruction form have been forwarded to you by your broker, bank or other financial institution or their designated representative. Through this process, your bank or broker collects the voting instructions from all of their respective customers who hold our shares and then submits those votes to us.

Because of a change in the rules of The NASDAQ Stock Market (NASDAQ) effective in 2010, your broker will NOT be able to vote your shares with respect to the election of directors unless you provide voting instructions to it. We strongly encourage you to return your voting instruction form and exercise your right to vote.

**What is a **broker non-vote**?**

A broker non-vote occurs when a broker's or bank's customer does not provide the broker or bank with voting instructions on **non-routine** matters for shares owned by the customer (sometimes referred to as the **beneficial owner** ) but held in the name of the broker or bank. For such matters, the broker or bank cannot vote on behalf of the beneficial owner and reports the number of such shares as **non-votes**. By contrast, if a proposal is considered **routine**, the broker or bank, in its discretion, may vote any shares as to which it has not received specific instructions from its customer. Each bank or broker has its own policies that control whether or not it casts votes for routine matters.

Table of Contents

Whether the proposal is non-routine or routine is governed by NASDAQ rules. The election of directors (Proposal 1 on the Notice of Annual Meeting) is considered non-routine by NASDAQ; the ratification of our independent registered public accounting firm (Proposal 2) is considered routine.

**What is the effect of not casting my vote?**

Changes in NASDAQ regulations in 2010 eliminated the ability of your bank or broker to vote your uninstructed shares in the election of directors on a discretionary basis. Therefore, if you hold your shares in street name and you do not instruct your bank or broker how to vote in the election of directors (Proposal 1), no votes will be cast on your behalf. In the past, if you held your shares in street name and you did not indicate how you wanted your shares voted in the election of directors, your bank or broker was allowed to vote those shares on your behalf in the election of directors as it felt appropriate.

Your bank or broker will, however, continue to have discretion to vote any uninstructed shares on the ratification of the appointment of the Company's independent registered public accounting firm (Proposal 2). If you are a shareholder of record and you do not cast your vote, no votes will be cast on your behalf on any proposals at the Annual Meeting.

**How does the Board of Directors recommend that I vote?**

The Board of Directors recommends a vote:

**FOR** all of the nominees for director; and

**FOR** the ratification of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the 2011 fiscal year.

**What if I do not specify how I want my shares voted?**

If you submit a signed proxy card and do not specify how you want to vote your shares, we will vote your shares:

**FOR** all of the nominees for director;

**FOR** the ratification of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the 2011 fiscal year; and

in the discretion of the persons named in the proxy on any other proposals that properly come before the meeting and as to which we did not receive notice before March 17, 2011.

**Can I change my vote after submitting my proxy or voting instructions?**

Yes. You may revoke your proxy at any time before the proxy vote is cast at the annual meeting in any of the following ways:

by giving written notice of revocation to Gregory R. L. Smith, our Chief Financial Officer and Corporate Secretary;

by submitting a later-dated proxy; or

by voting in person at the meeting.

Table of Contents

**Who pays for the cost of proxy preparation and solicitation?**

We pay for the cost of proxy preparation and solicitation.

We are soliciting proxies primarily by mail. In addition, some of our officers, directors and regular employees may solicit the return of proxies by telephone, facsimile or personally. These individuals will receive no additional compensation for these services.

**How can I communicate with the Board of Directors?**

Shareholders may communicate with our Board of Directors by sending a letter addressed to the Board of Directors or specified individual directors to:

The Office of the Corporate Secretary  
Image Sensing Systems, Inc.  
500 Spruce Tree Centre  
1600 University Avenue West  
St. Paul, MN 55104

Our Corporate Secretary will deliver such letters to a director that can address the matter, or to a specified director if so addressed.

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

The following table sets forth certain information with respect to beneficial ownership of our common stock as of March 28, 2011 by (1) each person or entity known by us to own beneficially more than five percent of our common stock; (2) each director and nominee for election as a director of Image Sensing Systems, Inc.; (3) each of our executive officers named in the Summary Compensation Table below; and (4) all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and includes voting power and investment power with respect to our securities. Shares of our common stock issuable pursuant to stock options and convertible securities that are exercisable or convertible as of or within 60 days after March 28, 2011 are deemed outstanding for computing the beneficial ownership percentage of the person or member of a group holding the options but are not deemed outstanding for computing the beneficial ownership percentage of any other person. Except as indicated by footnote, the persons named in the table below have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. The address of each director and executive officer named below is the same as that of Image Sensing Systems, Inc.

| <b>Name and Address of Beneficial Owner</b>   | <b>Amount and Nature of Beneficial Ownership</b> | <b>Percent of Common Stock Outstanding<sup>(1)</sup></b> |
|---|--|--|
| <i>Five Percent Shareholders</i>  |  |  |
| Austin W. Marxe and David M. Greenhouse<br>527 Madison Avenue, Suite 2600<br>New York, NY 10022 | 1,083,520 <sup>(2)</sup>                         | 22.2%  |
| Rutabaga Capital Management<br>64 Broad Street<br>Boston, MA 02109                              | 493,911 <sup>(3)</sup>                           | 10.1%  |
| Nicusa Capital Partners L.P.<br>17 State Street, Suite 1650<br>New York, NY 10004               | 366,416 <sup>(4)</sup>                           | 7.5%   |
| FMR LLC<br>82 Devonshire Street<br>Boston, MA 02109   | 360,000 <sup>(5)</sup>                           | 7.4%   |
| Mackenzie Financial Corp.<br>180 Queen Street West<br>Toronto, Ontario M5V 3K1<br>Canada        | 321,800 <sup>(6)</sup>                           | 6.6%   |
| <i>Executive Officers and Directors</i>   |  |  |
| Kenneth R. Aubrey   | 51,000 <sup>(7)</sup>                            | 1.0%   |
| Gregory R. L. Smith   | 26,250 <sup>(7)</sup>                            | *  |
| Daniel W. Skites  |  |  |
| James W. Bracke   | 17,000 <sup>(7)</sup>                            | *  |
| Michael C. Doyle  | 100  | *  |
| Michael G. Eleftheriou  | 42,000 <sup>(7)</sup>                            | *  |
| Panos G. Michalopoulos  | 346,298 <sup>(7)(8)</sup>                        | 7.0%   |
| James Murdakes  | 47,000 <sup>(7)</sup>                            | 1.0%   |
| Sven A. Wehrwein  | 30,000 <sup>(7)</sup>                            | *  |
| All directors and executive officers as a group (nine persons)                                  | 556,648 <sup>(7)(8)</sup>                        | 10.9%  |

Table of Contents

\* Less than one percent.

- (1) Based on 4,880,819 shares outstanding as of March 28, 2011.
- (2) We have relied upon the information supplied by Austin W. Marx and David M. Greenhouse in a Schedule 13D/A it filed with the Securities and Exchange Commission ( SEC ) on May 10, 2010. The reported shares are held in discretionary accounts over which Messrs. Marx and Greenhouse share sole voting and investment power.
- (3) We have relied upon the information supplied by Rutabaga Capital Management in a Schedule 13G/A it filed with the SEC on April 18, 2011.
- (4) We have relied upon the information supplied by Nicusa Capital Partners L.P. in a Schedule 13G/A it filed with the SEC on February 15, 2011.
- (5) We have relied upon the information supplied by FMR LLC in a Schedule 13G it filed with the SEC on February 14, 2011.
- (6) We have relied upon the information supplied by Mackenzie Financial Corp. in a Schedule 13G it filed with the SEC on February 22, 2011.
- (7) Includes shares issuable pursuant to options exercisable as of or within 60 days after March 28, 2011: for Mr. Aubrey, 51,000 shares; for Mr. Smith, 23,750 shares; for Mr. Bracke, 16,000 shares; for Mr. Eleftheriou, 42,000 shares; for Dr. Michalopoulos, 52,000 shares; for Mr. Murdakes, 16,000 shares; for Mr. Wehrwein, 30,000 shares; and for all directors and executive officers as a group, 230,750 shares.
- (8) Includes 294,298 shares held by Transatlantic Emporium & Technology Exchange LLC, a company controlled by Dr. Michalopoulos.

**SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE**

Section 16(a) of the Securities Exchange Act of 1934 requires our executive officers and directors and persons who beneficially own more than 10% of our common stock to file initial reports of ownership and reports of changes in ownership of our common stock with the Securities and Exchange Commission. Executive officers, directors and beneficial owners of more than 10% of our common stock are required by regulations of the Securities and Exchange Commission to furnish us with copies of all Section 16(a) reports they file. Based solely on a review of the copies of such forms furnished to us and written representations from the executive officers and directors, we believe that all of our executive officers, directors and beneficial owners of more than 10% of our common stock complied with all Section 16(a) filing requirements applicable to them for fiscal 2010.

Table of Contents

**PROPOSAL 1 - ELECTION OF DIRECTORS**

The business and affairs of Image Sensing Systems, Inc. are managed under the direction of our Board of Directors, which presently is comprised of seven members. Each of our directors is elected until the next annual meeting of shareholders and until the director's successor has been elected and qualifies to serve as a director. All of the nominees presently are members of the Board of Directors.

**The Board of Directors recommends that you vote FOR election of the seven nominated directors. Proxies will be voted FOR the election of the seven nominees unless otherwise specified.**

If for any reason any nominee shall be unavailable for election to the Board of Directors, the named proxies will vote for such other candidate or candidates as may be nominated by the Board of Directors. The Board of Directors has no reason to believe that any of the nominees will be unable to serve.

The nominees for election to our Board of Directors provided the following information about themselves as of April 15, 2011.

**Kenneth R. Aubrey**, age 62, was appointed as President in January 2007 and as Chief Executive Officer in May 2007. He was elected to the Board of Directors at our annual meeting of shareholders held in May 2007. From 1995 to 2006, Mr. Aubrey held various positions with Siemens AG, most recently as a business unit president of Siemens ITS Division, Industrial Solutions & Services Group. He concurrently managed Strategic Projects for the ITS Division. Prior to this, Mr. Aubrey served as a vice president of Strategic Projects for Siemens Information and Communication Networks Group.

Mr. Aubrey is qualified to serve on our Board due to his experiences at high technology companies, including management and technical roles. He also has desirable experience from living and working in Europe and Asia.

**James W. Bracke**, age 63, has been a director since 2009. Mr. Bracke has been the Managing Director of Green Gas LLC, a medical waste-to-energy company, since January 2009. He has been the President of Boulder Creek Consulting, LLC, a business and technology consulting firm, since 2004. From 2004 to 2006, he was Vice President of EPIEN Medical, Inc., a privately-held medical device company. Mr. Bracke is also a director of HickoryTech Corporation, a publicly-held company. Mr. Bracke is a member of the Audit Committee and the Nominating and Corporate Governance Committee.

Mr. Bracke is qualified to serve on our Board due to his management, technical and public company experiences, most significantly his 20 years as President and Chief Executive Officer of Lifecore Biomedical, Inc., a publicly-held medical device manufacturer, from 1983 to 2004.

**Michael C. Doyle**, age 68, was named a director in April 2011. Mr. Doyle has been the Chairman and Chief Executive Officer of Econolite Group, Inc., a traffic control equipment manufacturer and distributor and parent company to Econolite Control Products, Inc. since 1978. Prior to this, he was a partner in the public accounting firm Alexander Grant & Company (a predecessor to Grant Thornton LLP). He has also been a partner in the law firm of Stone & Doyle since 1978. Mr. Doyle was also Chairman of ITS America for the 2007-2008 term.

Mr. Doyle is qualified to serve on our Board due to his extensive knowledge of the traffic control and intelligent traffic systems markets. He also has a 20 year association with our company through Econolite Control Products, Inc.'s distribution agreement. Additionally, he has gained desirable management, legal and financial expertise over his career.

**Michael G. Eleftheriou**, age 66, has been a director since 2002. Mr. Eleftheriou has been the President of Applied Business & Consulting LLC, a business consulting practice, since September 2009. He also serves as President of Business Development and M&A at NJK Holding Corp., an investment firm, and, since August 2010, he has been

Table of Contents

Chairman of the Board of iCelero LLC, a semiconductor and software technology company focused on the optimization of mobile devices data traffic. In 2008 and 2009, he was President and Chief Operating Officer of Zomax, Inc., a producer of software digital media, which was acquired in 2009 by Bertlesman's Arvato Digital Services. Between 2005 and 2008, he was an executive advisor for the Comvest Group, an investment fund, and he served as President and Chief Executive Officer of Catalyst International Inc., a developer of supply chain execution software and services. Catalyst was acquired by CDC Software, a China.com company, in Sept 2007. He is chair of the Compensation and Stock Option Committee and a member of the Audit Committee.

Mr. Eleftheriou is qualified to serve on our Board due to his experience in senior executive management and in operational, sales and technology positions with the companies identified above and with Control Data Corporation, where he served in a variety of roles, domestically and internationally, from 1968 to 2001, at which point he was the President of Control Data Systems Integration Services, and he exited the company following its acquisition by British Telecoms. He also has desirable international and global operations experience.

**Panos G. Michalopoulos**, age 62, is our founder and has been a director since 1984. Dr. Michalopoulos was a professor in the Department of Civil Engineering at the University of Minnesota from 1997 to 2009. Dr. Michalopoulos is chair of the Nominating and Corporate Governance Committee and a member of the Compensation and Stock Option Committee.

Dr. Michalopoulos is qualified to serve on our Board due to his long association with our company and understanding of our business and technology, including being the Chairman of the Board from our inception in 1984 through 1999 and serving as Chief Scientific Advisor from 1995 through 2000. He also has more than 40 years of research, teaching and consulting experience in traffic engineering operations surveillance and control, and has worked as a traffic engineer. In addition, Dr. Michalopoulos has significant associations with various professional organizations that represent the end users of our products.

**James Murdakes**, age 78, has been a director since 1994. Mr. Murdakes was elected as Chairman of the Board in February 2002 and was Chief Executive Officer from April 2002 until May 2007. He was also President from April 2002 until January 2007. He was retired from full-time employment beginning in July 2007. Mr. Murdakes is also a director of Control Corporation, a private corporation providing data communications products.

Mr. Murdakes is qualified to serve on our Board due to his long association with our company and understanding of our business. Additionally, he has experiences in senior management and marketing positions with numerous companies, most significantly Control Data Corporation.

**Sven A. Wehrwein**, age 60, has been a director since 2006. Mr. Wehrwein has been an independent financial consultant to emerging companies since 1999. Mr. Wehrwein is also a director of SPS Commerce, Inc., Synovis Life Technologies, Inc., Uroplasty, Inc., and Vital Images, Inc., all of which are publicly-held companies. He also served on the board of directors of Compellent Technologies, Inc. from 2007 until its acquisition by Dell Inc. in February 2011. Mr. Wehrwein also served as a director of six mutual funds in the Van Wagoner group in 2005 and 2006. Mr. Wehrwein is chair of the Audit Committee and is a member of the Nominating and Corporate Governance Committee and Compensation and Stock Option Committee.

Mr. Wehrwein is qualified to serve on our Board due to his over 30 years of experience in investment banking and financial leadership positions which brings capabilities in financial understanding, strategic planning and auditing expertise. He has been the chair of audit committees for us and other companies for several years, gaining broad exposure to audit issues and collaborating with independent auditors.

In addition to Mr. Aubrey, the other executive officers of Image Sensing Systems, Inc. and their biographical information are as follows:



Table of Contents

**Daniel W. Skites**, age 44, was appointed as Vice President of Sales and Marketing in November 2010. From August 2007 through October 2010, Mr. Skites held sales and business development senior management positions at Global Traffic Technologies, LLC, a privately-held traffic products company that was formed by 3M Company's divestiture of certain of its traffic assets. Prior to this, he was a Business Development Manager for 3M Company, a publicly-held conglomerate, within its traffic division.

**Gregory R. L. Smith**, age 44, was appointed as Chief Financial Officer and Treasurer in January 2007. From 2002 through 2006, Mr. Smith was Chief Financial Officer of MQSoftware, Inc., a privately-held software developer. He has prior experience as a vice president for Digital River, Inc., a publicly-held e-commerce outsourcing provider, and as a certified public accountant with Ernst & Young LLP.

Table of Contents

**CORPORATE GOVERNANCE**

Our Board of Directors and management are dedicated to exemplary corporate governance. In 2004, we adopted a Code of Ethics and Business Conduct. This Code is a statement of our high standards for ethical behavior and legal compliance, and it governs the manner in which we conduct our business. A copy of our Code of Ethics and Business Conduct can be found on our website at [www.imagesensing.com](http://www.imagesensing.com) by clicking on "Investor Relations" and then on "Corporate Code of Ethics and Business Conduct."

**Board Composition and Meetings**

Our Board of Directors has determined that five of our seven directors are independent directors as defined under the applicable rules of the SEC and NASDAQ. The five independent directors are James W. Bracke, Michael G. Eleftheriou, James Murdakes, Panos G. Michalopoulos and Sven A. Wehrwein. Each of the Committees of the Board is composed of only independent directors. In making the independence determinations, we reviewed all of our directors' relationships with us based primarily on a review of the responses of the directors to questions regarding employment, business, familial, compensation and other relationships with us and our management.

We believe our Board of Directors, taken as a whole, possesses an appropriate combination of skills and experiences. The majority of our Board members have experience in operating and advising high-growth technology-based businesses. Individually, our directors have varied experiences in small and large publicly-held companies, in the operational areas of engineering, sales, marketing and finance and in academic and applied settings within the traffic industry.

The Board of Directors held nine meetings during 2010 in addition to Board Committee meetings. Each director attended at least 75% of the total meetings of the Board and Board Committees on which the director served during 2010.

**Board Leadership Structure**

We separate the roles of Chief Executive Officer and Chairman of the Board of Directors. The Company believes that such a separation benefits the Company by enhancing the opportunities for checks and balances between the Company's strategies and its objectives and ensuring that a wider selection of alternative measures are considered. Our current Chairman, James Murdakes, has served in that role since February 2002, and our current Chief Executive Officer, Kenneth R. Aubrey, has served in that role since May 2007.

**Risk Oversight**

The Board of Directors, in conjunction with management, has identified and prioritized various enterprise risks, and each prioritized risk is assigned to a Board Committee or the full Board for oversight. For example, financial risks are overseen by the Audit Committee; compensation risks are overseen by the Compensation and Stock Option Committee; Chief Executive Officer succession planning is overseen by the Governance and Nominating Committee; and strategic, legal and compliance risks are typically overseen by the full Board. Management regularly reports on each such risk to the relevant Committee or the Board, and material risks identified by a relevant Committee are then presented to the full Board. Additional review or reporting on enterprise risks is conducted as needed or as requested by the Board or Committee. Coordination of management's review of risks is performed by the Chief Financial Officer, who reports to the Chief Executive Officer.

Table of Contents**Board Committees**

Our Board of Directors conducts its business through meetings of the Board and the following three Committees: Audit Committee, Compensation and Stock Option Committee, and Nominating and Corporate Governance Committee. Each of these Committees has adopted and operates under a written charter. Copies of the charters are posted on our website at [www.imagesensingsystems.com](http://www.imagesensingsystems.com). The current membership of the Committees is described below.

| <b>Audit Committee</b>   | <b>Compensation and Stock Option Committee</b> | <b>Nominating and Corporate Governance Committee</b> |
|--------------------------|--|--|
| Sven A. Wehrwein (Chair) | Michael G. Eleftheriou (Chair)                 | Panos G. Michalopoulos (Chair)                       |
| James W. Bracke          | Panos G. Michalopoulos                         | James W. Bracke                                      |
| Michael G. Eleftheriou   | Sven A. Wehrwein                               | Sven A. Wehrwein                                     |

***Audit Committee***

The Audit Committee is responsible for the selection and compensation of the independent registered public accounting firm, and it reviews with the independent registered public accounting firm the scope of the annual audit, matters of internal control and procedure and the adequacy thereof, the audit results and reports and other general matters relating to our accounts, records, controls and financial reporting. The Audit Committee members meet the requirements for financial literacy under the applicable rules and regulations of the SEC and NASDAQ. Our Board of Directors has identified James W. Bracke, Michael G. Eleftheriou and Sven A. Wehrwein to be audit committee financial experts as defined in the applicable rules of the SEC. Each member of our Audit Committee possesses the financial qualifications required of audit committee members set forth in the rules and regulations of NASDAQ and under the Securities Exchange Act of 1934. During 2010, the Audit Committee held seven meetings.

***Compensation and Stock Option Committee***

The Compensation and Stock Option Committee reviews and recommends to the Board of Directors the compensation guidelines and stock option grants for executive officers and other key personnel. During 2010, the Compensation and Stock Option Committee held five meetings. The Committee's primary responsibilities include:

annually reviewing and approving corporate goals and objectives relevant to the compensation of the Company's named executive officers, including its Chief Executive Officer and Chief Financial Officer, evaluating their performances in light of those goals and objectives, and subsequently determining their incentive compensation levels based on this evaluation and other factors deemed relevant and appropriate by the Committee;

annually reviewing and determining for our named executive officers, including our Chief Executive Officer and Chief Financial Officer, their annual base salary level, their annual incentive opportunity levels, employment agreements, severance arrangements and change of control agreements/provisions, and special or supplemental benefits, if any; and

reviewing and making recommendations to the Board of Directors with respect to compensation programs and policies, including incentive compensation plans and equity-based plans.

***Nominating and Corporate Governance Committee***

The Nominating and Corporate Governance Committee recommends new director nominees to the Board and recommends policy guidelines on corporate governance issues. During 2010, the Nominating and Corporate Governance Committee held two meetings.

Table of Contents

**Compensation Committee Interlocks and Insider Participation**

No executive officer serves as a member of the board of directors or compensation committee of any entity that has any of its executive officers serving as a member of our Board of Directors or Compensation Committee.

**Executive Sessions of the Board**

At least twice annually, our independent directors meet in executive session without any director who does not meet the independence requirements of the listing standards of NASDAQ being present. During 2010, our independent directors met more than two times in executive session.

**Board Nomination Process**

The Nominating and Corporate Governance Committee determines the required selection criteria and qualifications of director nominees based upon our needs at the time nominees are considered. Directors should possess the highest personal and professional ethics, integrity and values and be committed to representing the long-term interests of our shareholders. In evaluating a candidate for nomination as a director of Image Sensing Systems, Inc., the Nominating and Corporate Governance Committee considers criteria including business and financial expertise; where the director resides; experience as a director of a public company; diversity of background and experience on the Board; and general criteria such as ethical standards, independent thought, practical wisdom and mature judgment. The Nominating and Corporate Governance Committee will consider these criteria for nominees identified by the Nominating and Corporate Governance Committee, by shareholders, or through some other source. The Nominating and Corporate Governance Committee does not have a policy that specifically addresses diversity in its nominating process.

The Nominating and Corporate Governance Committee will consider qualified candidates for possible nomination that are submitted by our shareholders. Shareholders wishing to make such a submission may do so by sending the following information to the Nominating and Corporate Governance Committee, c/o Corporate Secretary, at the address indicated on the Notice of Annual Meeting of Shareholders: (1) name of the candidate and a brief biographical sketch and resume; (2) contact information for the candidate and a document evidencing the candidate's willingness to serve as a director if elected; and (3) a signed statement as to the submitting shareholder's current status as a shareholder and the number of shares currently held.

The Nominating and Corporate Governance Committee conducts a process of making a preliminary assessment of each proposed nominee based upon the resume and biographical information, an indication of the individual's willingness to serve and other background information. This information is evaluated against the criteria set forth above and our specific needs at that time. Based upon a preliminary assessment of the candidate(s), those who appear best suited to meet our needs may be invited to participate in a series of interviews, which are used as a further means of evaluating potential candidates. On the basis of information learned during this process, the Nominating and Corporate Governance Committee determines which nominee(s) to recommend to the Board to submit for election at the next annual meeting. The Nominating and Corporate Governance Committee uses the same process for evaluating all nominees, regardless of the original source of the nomination.

No candidates for director nominations were submitted by any shareholder in connection with the 2010 annual meeting.

**Policy Regarding Attendance at Annual Meetings**

We encourage, but do not require, our Board members to attend the annual meeting of shareholders. Last year, all of our directors attended the annual shareholders meeting.

**Non-Employee Director Compensation**

During 2010, each of our non-employee directors received a \$12,000 annual retainer, \$1,000 for each regular Board meeting attended, \$750 for each Committee meeting attended and \$500 for each special Board meeting attended. The Chairman of the Board received an additional \$5,000 annual retainer. The Committee chairs received the following additional annual retainers: Audit Committee - \$4,000; Compensation and Stock Option Committee - \$3,000; and Nominating and Corporation Governance Committee - \$3,000. Special Committees

Table of Contents

formed by the Board received \$750 for each special Committee meeting attended, with the Chair receiving an additional \$750 for each special Committee meeting attended. We have kept the director compensation program the same for 2011.

In connection with their initial appointment or election to the Board, non-employee directors are granted a non-incentive stock option to purchase shares of our common stock, the number of which is negotiated with each director, at an exercise price equal to the closing price on the most recent business day before the grant date. The option shares become exercisable in three equal installments on each of the first, second and third anniversary of the date of grant. Additionally, annual option awards of 4,000 shares are granted to non-employee directors who have not received an initial option grant within the previous year. All of these grants are made under our 2005 Stock Incentive Plan.

The following table provides information regarding the compensation earned by the members of the Board of Directors in 2010, other than Mr. Aubrey, who receives no compensation for being a director, and Mr. Doyle, who did not become a director until April 2011:

**Director Compensation 2010**

| Name                   | Fees Earned or<br>Paid in Cash <sup>(1)</sup><br>(\$) | Option<br>Awards <sup>(2)</sup><br>(\$) | All Other<br>Compensation<br>(\$) | Total<br>(\$) |
|------------------------|---|---|-----------------------------------|---------------|
| James Murdakes         | \$ 22,087   | \$ 7,560                                |                                   | \$ 29,647     |
| James W. Bracke        | \$ 23,750   | \$ 7,560                                |                                   | \$ 31,310     |
| Michael G. Eleftheriou | \$ 30,500   | \$ 7,560                                |                                   | \$ 38,060     |
| Panos G. Michalopoulos | \$ 25,500   | \$ 7,560                                |                                   | \$ 33,060     |
| Sven A. Wehrwein       | \$ 32,746   | \$ 7,560                                |                                   | \$ 40,306     |

- (1) Consists of fees earned for and paid in 2010, and fees earned for 2010 to be paid in 2011.
- (2) Represents the grant date fair value of option awards during the year determined pursuant to Financial Accounting Standards Board Accounting Standard Codification Topic 718, *Compensation - Stock Compensation* (ASC Topic 718). Refer to Note 14 Equity and Stock Options in our Annual Report on Form 10-K for the year ended December 31, 2010 for a discussion of the assumptions used in calculating the grant date fair value. There can be no assurance that the amounts reflected in the table will ever be realized. At December 31, 2010, the aggregate number of shares subject to option awards outstanding and held by each non-employee director was as follows: Mr. Murdakes 16,000; Mr. Bracke 22,000; Mr. Eleftheriou 42,000; Dr. Michalopoulos 52,000; and Mr. Wehrwein 30,000.

**EXECUTIVE COMPENSATION****Compensation Discussion and Analysis****Overview**

This compensation discussion describes the material elements of compensation awarded to, earned by or paid to each of our named executive officers. During 2010, our named executive officers were Kenneth R. Aubrey, our President and Chief Executive Officer; Gregory R. L. Smith, our Chief Financial Officer; and Dan Manor, the Managing Director of ISS Image Sensing Systems Canada Ltd. Mr. Manor retired from the Company in December 2010. The Board has determined that Mr. Daniel W. Skites, our Vice President of Sales and Marketing who began employment in November 2010, is a reporting person under Section 16(a) of the Securities and Exchange Act of 1934.

Table of Contents***Objectives of the Compensation Program***

The Compensation and Stock Option Committee sets the compensation programs for Messrs. Aubrey and Smith. The independent members of our Board approves their compensation. Mr. Dan Manor was compensated as provided under his employment agreement, which was approved by our Board of Directors in connection with our purchase of the EIS assets in December 2007.

The primary objective of our various compensation programs is to attract, motivate and retain key executives and align their compensation with our overall performance. Our Compensation and Stock Option Committee believes that incentive, performance-based compensation can be a key factor in motivating executive performance to maximize shareholder value and align executive performance with our corporate objectives and shareholder interests. To this end, the Committee has established a compensation philosophy that includes the following considerations:

an emphasis on performance-based compensation that differentiates compensation results based upon varying elements of company and individual performance;

a recognition of both quantitative and qualitative performance objectives based upon an executive officer's responsibilities; and

a mix of short-term cash and long-term equity-based compensation.

The Committee believes it is important, when making its compensation-related decisions, to be informed as to current practices of similarly situated companies, but the Committee does not rely on any specific comparator group in making compensation decisions. The Committee does not engage in benchmarking compensation against comparator groups, and it has not established targeted percentile rankings with respect to total compensation or the specific elements of compensation for the Company's named executive officers. Members of our Board of Directors and members of the Committee are experienced in compensation matters and leverage such experience in addressing compensation matters and practices.

***Design of the Compensation Program for the Chief Executive and Chief Financial Officers***

The Committee has designed the compensation program for the Chief Executive Officer and Chief Financial Officer to achieve the objectives described above, to ensure market competitiveness and to assure satisfaction of our objective of providing total executive pay that achieves an appropriate balance of variable pay-for-performance and at-risk compensation. The compensation program will reward the officer based upon corporate performance as well as the performance of that officer.

The compensation program includes consideration for the following elements: base salary, annual cash incentives, stock option grants and other benefits. We characterize the annual cash incentives and the stock options that are granted to our named executive officers as performance-based compensation. Our executive compensation policy provides that a significant portion of the total compensation payable to our named executive officers will be in the form of performance-based compensation. Although we do not have a target for each element of compensation relative to total compensation, the following table shows actual bonus payment amounts relative to total compensation paid for 2010 and 2009 to Messrs. Aubrey and Smith.

| Named Executive Officer | Year | Actual Total<br>Compensation | Actual<br>Bonus Paid | Actual Bonus Paid as       |
|-------------------------|------|------------------------------|----------------------|----------------------------|
|                         |      |                              |                      | %<br>of Total Compensation |
| Kenneth R. Aubrey       | 2010 | \$ 506,000                   | \$ 76,000            | 15.0%                      |
|                         | 2009 | \$ 404,175                   | \$ 49,000            | 12.1%                      |
| Gregory R. L. Smith     | 2010 | \$ 279,000                   | \$ 39,000            | 14.0%                      |
|                         | 2009 | \$ 244,260                   | \$ 24,000            | 9.8%                       |

Table of Contents

The elements of our compensation program are described below:

*Base Salaries.* Base salary is an important element of executive compensation because it provides executives with a fixed level of regular periodic income. In determining base salaries for our named executive officers, the Committee considers historic individual and corporate performance, level of responsibility and market and competitive data. The Committee establishes base salaries at a level such that a significant portion of the total compensation that a named executive officer can earn is performance-based cash incentives and equity awards.

*Annual Cash Incentive.* As part of our executive compensation program, our executive officers may receive annual cash incentive awards pursuant to our annual cash bonus program. Targeted bonus amounts are designed to provide competitive incentive pay and reflect our pay-for-performance philosophy. For 2010, Messrs. Aubrey and Smith received bonuses of \$76,000 and \$39,000, respectively, which amounts represent approximately 70% and 72% of each executive officer's maximum potential bonus. The Committee historically has reviewed target bonus amounts annually.

Performance objectives intended to focus attention on achieving key goals are established at the beginning of each fiscal year. The primary quantitative objective is achievement of revenue and net income targets set forth in our annual operating plan established by the Board of Directors. Specifically, these include metrics such as revenue and net profit (after tax) and international operations revenue and operating profit. Additionally, each named executive officer's performance is judged on success in achieving certain strategic and operational initiatives. In evaluating an executive's performance, the Committee may consider other factors in awarding bonuses and may, in its discretion, award as a discretionary bonus a portion of any bonus amount that is not earned based upon achievement of the financial metrics described above. The Committee reviews the individual incentive components of Messrs. Aubrey's and Smith's employment agreements, described below, and evaluates the objective portions relative to our performance. The Committee also evaluates the subjective, individual performance goals in determining the total amount of bonus to be awarded, and has the ability to exercise discretion with respect to this portion. For Messrs. Aubrey and Smith, up to one-third of the bonus calculation may be associated with strategic and operational initiatives and, as such, is considered to be discretionary.

*Stock Option Grants.* Our executive officers also may receive equity-based incentive compensation under our 2005 Stock Incentive Plan. Grants under the 2005 Stock Incentive Plan are designed to align a significant portion of the executive compensation package with the long-term interests of our shareholders. All stock options granted by the Committee in 2010 to executive officers vest 25% on each anniversary of the grant date, beginning on the first anniversary date of the date of grant. This vesting schedule is intended to require long-term focus on performance for the executive to realize value from the exercise of stock options. In addition, stock options are generally granted with an exercise price equal to the closing sale price of the stock the day before the grant, and they provide no cash benefit if the price of the stock does not exceed the grant price during the option's term. Therefore, for any value to be derived from an option grant, our performance needs to result in increased stock performance and shareholder value over a multi-year period.

Individual equity awards historically have been recommended by the Committee based on an officer's current performance, potential for future contribution and responsibility and market competitiveness. Messrs. Aubrey and Smith received option grants in 2010 of 30,000 and 10,000 shares, respectively.

*Retirement Plans.* We generally expect executives to plan for and fund their own retirement. We maintain a 401(k) plan that permits eligible employees, including our named executive officers, to defer a limited portion of salary and bonus into any of several investment alternatives. We make matching contributions equal to 50% of the first 6% of compensation deferred by employees subject to a maximum annual match of \$5,000 and maximums established under the Internal Revenue Code of 1986. We may also make discretionary contributions to the 401(k) plan as profit sharing. Payments made to named executive officers for matching contributions and profit sharing are included in the Summary Compensation Table below. We do not maintain defined benefit retirement or senior executive retirement plans or provide post-retirement medical benefits for our executive officers.

Table of Contents

*Other Benefits and Perquisites.* Our executive compensation program also includes other benefits and perquisites. The named executive officers participate in company-sponsored group benefit plans such as health, life and disability insurance plans available to all employees. In addition, executive officers may upon joining the company receive assistance in relocating. For more detailed information regarding benefits and perquisites provided to our executive officers, see the Summary Compensation Table included elsewhere in this proxy statement.

*2011 Compensation Program.* For 2011, the Compensation and Stock Option Committee set base salaries of \$260,000 and \$180,000 for Messrs. Aubrey and Smith, respectively. The annual cash incentive tiers for Messrs. Aubrey and Smith for threshold/target/superior performance are \$40,000/\$80,000/\$120,000 and \$20,000/\$40,000/\$60,000, respectively. The annual cash incentive program components are similar in nature to previous years. The Committee determines stock option grants, if any, after the year has concluded and does not have a predetermined formula for making such awards.

***Named Executive Officers Role in Compensation Decisions***

The Committee recommends to the Board of Directors the actual and targeted compensation of our named executive officers. The Board, with the non-independent members abstaining, approves the compensation of our executive officers. The Committee determines its recommendations regarding each named executive officer's compensation plan based on major goals and objectives established by the Board of Directors. The Committee also receives input from our Chief Executive Officer regarding an executive officer's leadership capabilities, past performance and potential for future contributions when making its recommendations on actual and targeted compensation amounts for named executive officers.

***Other Considerations***

Although the Committee considers tax and accounting issues in connection with its compensation decisions, those have not become material factors in the Committee's compensation decisions to date.



Table of Contents**Compensation and Stock Option Committee Report on Executive Compensation**

*Notwithstanding anything to the contrary set forth in any of our previous or future filings under the Securities Act of 1933 or the Securities Exchange Act of 1934 that might incorporate future filings by reference, including this proxy statement, in whole or in part, the following report of the Compensation and Stock Option Committee shall not be deemed to be incorporated by reference into any such filings and shall not otherwise be deemed filed under such acts.*

We have reviewed and discussed the foregoing Compensation Discussion and Analysis with management. Based on our review and discussion with management, we have recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement and in our Annual Report on Form 10-K for the year ended December 31, 2010.

By the Compensation and Stock Option Committee

Michael G. Eleftheriou, *Chair*  
Panos G. Michalopoulos  
Sven A. Wehrwein

**Summary Compensation Table 2010 and 2009**

The following table sets forth information about compensation awarded to, earned by or paid to our named executive officers during 2010 and 2009.

| Name and Principal Position  | Year | Salary<br>(\$) | Option<br>Awards <sup>(1)</sup><br>(\$) | Non-Equity<br>Incentive<br>Plan<br>Compensation <sup>(2)</sup><br>(\$) | All Other<br>Compensation <sup>(3)</sup><br>(\$) | Total<br>(\$) |
|--|------|----------------|---|--|--|---------------|
| Kenneth R. Aubrey<br><i>Chief Executive Officer and<br/>President</i>                                      | 2010 | \$ 245,000     | \$ 180,000                              | \$ 76,000  | \$ 5,000   | \$ 506,000    |
|  | 2009 | \$ 225,000     | \$ 126,500                              | \$ 49,000  | \$ 3,675   | \$ 404,175    |
| Dan Manor <sup>(4)</sup><br><i>Former Managing Director, ISS<br/>Image Sensing Systems<br/>Canada Ltd.</i> | 2010 | \$ 190,304     | \$                                      | \$   | \$   | \$ 190,304    |
|  | 2009 | \$ 176,058     | \$                                      | \$   | \$   | \$ 176,058    |
| Gregory R. L. Smith<br><i>Chief Financial Officer</i>  | 2010 | \$ 175,000     | \$ 60,000                               | \$ 39,000  | \$ 5,000   | \$ 279,000    |
|  | 2009 | \$ 154,000     | \$ 61,260                               | \$ 24,000  | \$ 5,000   | \$ 244,260    |

- (1) Consists of the grant date fair value of option awards during each year determined pursuant to ASC Topic 718, including, for 2009, the incremental fair value of options exchanged as part of the shareholder approved option exchange program. Refer to Note 14 Equity and Stock Options in our Annual Report on Form 10-K for the year ended December 31, 2010 for a discussion of the assumptions used in calculating the grant date fair value. There can be no assurance that the amounts reflected in the table will ever be realized.
- (2) Consists of awards made for 2010 and 2009 pursuant to the incentive plan component of each named executive officer's employment agreement.
- (3) Consists of a company match paid into the 401(k) plan account of the officer.
- (4) Mr. Manor retired from the Company in December 2010.

Table of Contents**Grants of Plan-Based Awards 2010**

In the following table, we have provided information regarding non-equity incentive plan awards and regarding stock option awards made to our named executive officers in 2010 under our 2005 Stock Incentive Plan.

| Name                | Grant Date | Estimated Future Payouts Under Non-Equity Incentive Plan Awards <sup>(1)</sup> |            |             | All Other Option Awards: Number of Securities Underlying Options (#) | Exercise or Base Price of Option Awards (\$/Sh) | Grant Date Fair Value of Stock and Option Awards <sup>(2)</sup> |
|---------------------|------------|--|------------|-------------|--|---|---|
|                     |            | Threshold(\$)  | Target(\$) | Maximum(\$) |  |   |   |
| Kenneth R. Aubrey   | 3/8/10     | \$ 36,000  | \$ 72,000  | \$ 108,000  | 30,000 <sup>(3)</sup>  | \$ 12.75  | \$ 180,000  |
| Dan Manor           |            |  |            |             |  |   |   |
| Gregory R. L. Smith | 3/8/10     | \$ 18,000  | \$ 36,000  | \$ 54,000   | 10,000 <sup>(3)</sup>  | \$ 12.75  | \$ 60,000   |

- (1) Represents the range of awards under the incentive component for 2010 of each of the named executive officer's employment agreement. The amounts in these columns reflect the minimum payment level if an award is achieved, the target payment level and the maximum payment level under each plan if superior performance is attained. Amounts actually paid for 2010 are set forth in the Non-Equity Incentive Plan Compensation column of the Summary Compensation Table 2010 and 2009 above.
- (2) Represents the grant date fair value determined pursuant to ASC Topic 718. Generally, the grant date fair value is the amount expensed in our financial statements over the vesting schedule of the stock options. In the case of the exchanged options, the fair value is the incremental fair value resulting from the exchange.
- (3) Consists of stock options. The options vest in annual installments of 25% for four years on each anniversary date of the date of grant, beginning on the first anniversary date of the date of grant.

**Outstanding Equity Awards at Fiscal Year-End 2010**

In February 1995, we adopted the 1995 Long-Term Incentive and Stock Option Plan, and in April 2005, we adopted the 2005 Stock Incentive Plan, which provide for the granting of incentive stock options, non-qualified stock options, stock appreciation rights, restricted stock awards and performance awards to our officers, directors, employees, consultants and independent contractors. The 1995 plan expired in February 2005, although its expiration did not affect the options then outstanding under the plan. Only incentive stock options and non-qualified stock options have been granted to date under the 1995 plan and the 2005 plan. Options granted to employees under the plans generally vest over three to five years based on service and have a contractual term of six to ten years. As of December 31, 2010, there were options outstanding under the plans to purchase 463,433 shares with a weighted average exercise price per share of \$9.11.

Table of Contents

In the following table, we have provided information regarding outstanding stock option awards held at December 31, 2010 by the named executive officers.

| Name                | Option Awards   |   | Option Exercise Price (\$) | Option Expiration Date |
|---------------------|---|---|----------------------------|------------------------|
|                     | Number of Securities Underlying Unexercised Options (#) Exercisable | Number of Securities Underlying Unexercised Options (#) Unexercisable |                            |                        |
| Kenneth R. Aubrey   | 12,500  | 37,500 <sup>(1)</sup>   | \$ 9.22                    | 6/22/2015              |
|                     | 9,000   | 9,000 <sup>(2)</sup>  | \$ 12.37                   | 3/27/2014              |
|                     | 5,000   | 15,000 <sup>(3)</sup>   | \$ 8.89                    | 6/5/2015               |
|                     |   | 30,000 <sup>(4)</sup>   | \$ 12.75                   | 3/8/2016               |
| Dan Manor           |   |   |                            |                        |
| Gregory R. L. Smith | 5,500   | 18,000 <sup>(1)</sup>   | \$ 9.22                    | 6/22/2015              |
|                     | 4,500   | 4,500 <sup>(2)</sup>  | \$ 12.37                   | 3/27/2014              |
|                     | 2,500   | 7,500 <sup>(3)</sup>  | \$ 8.89                    | 6/5/2015               |
|                     |   | 10,000 <sup>(4)</sup>   | \$ 12.75                   | 3/8/2016               |

- (1) Options were part of the shareholder-approved stock option exchange program and vest in annual installments of 25% for four years beginning on January 1, 2010.
- (2) Options vest in annual installments of 25% for four years beginning on March 27, 2009.
- (3) Options vest in annual installments of 25% for four years beginning on June 5, 2010.
- (4) Options vest in annual installments of 25% for four years beginning on March 8, 2011.

**Option Exercises and Stock Vested 2010**

On May 10, 2010, Mr. Gregory R. L. Smith exercised an option to purchase 500 shares of our common stock at an exercise price of \$9.22 per share when the market price of our common stock was \$12.86 per share, realizing an aggregate dollar amount of \$1,820. There were no other stock options exercised by the named executive officers in 2010. We currently do not have programs involving direct or restricted stock grants.

**Stock Options**

Under the terms of our stock incentive plans, if a participant's employment with us terminates by reason of the participant's death or disability, then, to the extent a stock option held by the participant is vested as of the date of death or disability, the stock option may be exercised by the participant, the legal representative of the participant's estate, the legatee of the participant under the will of the participant, or the distributee of the participant's estate, whichever is applicable, for a period of one year from the date of death or disability or until the expiration of the stated term of the stock option, whichever period is shorter. Any options that are not vested as of the date of death or termination due to disability will immediately lapse and be of no further force or effect.

If a participant's employment with us terminates for any reason other than death or disability or other than for cause, then, to the extent any stock option held by the participant is vested as of the date of termination, the stock option may be exercised for a period of 90 days from the date of termination or until the expiration of the stated term of the stock option, whichever period is shorter. Any options that are not vested as of the date of termination will immediately lapse and be of no further force or effect. Upon the termination of the participant's employment by us

Table of Contents

for cause, any and all unexercised stock options granted to the participant will immediately lapse and be of no further force or effect.

In the event of a change in control of our company, all stock options held by executive officers then outstanding and not fully vested will become fully vested and exercisable in accordance with their terms. For purposes of the stock option plans under which there are outstanding and not fully vested stock options, a change in control means the happening of one of the following:

a public announcement that any entity has acquired or has the right to acquire beneficial ownership of 51% or more of the then outstanding shares of common stock of our company;

the commencement of or public announcement of an intention to make a tender or exchange offer for 51% or more of the then outstanding shares of the common stock of our company;

a sale of all or substantially all of the assets of our company; or

the Board of Directors, in its sole discretion, determines that there has been a sufficient change in the stock ownership of our company to constitute a change in control.

**Employment Agreements**

***Kenneth R. Aubrey***

On December 12, 2006, we entered into an employment agreement with Kenneth R. Aubrey providing that Mr. Aubrey served at will as our President from January 15, 2007 through May 31, 2007, at which point Mr. Aubrey assumed the additional duties of Chief Executive Officer. Under the agreement, Mr. Aubrey initially was paid an annualized salary of \$175,000 through May 31, 2007 and then an annualized salary of \$200,000, subject to adjustment by our Compensation and Stock Option Committee in its sole and absolute discretion. In 2011, his salary was adjusted to \$260,000 annually. He receives insurance and other benefits in accordance with our standard employee programs. As provided in our agreement with Mr. Aubrey, upon commencing employment, we granted Mr. Aubrey an option to purchase 50,000 shares. In addition, Mr. Aubrey received three weeks vacation per year on an accrual basis and a relocation allowance not to exceed \$15,000, and he is eligible for any bonus awarded for achieving corporate financial and strategic objectives as set forth by our Compensation and Stock Option Committee. If Mr. Aubrey's employment is terminated by us without cause, our agreement with Mr. Aubrey provides that Mr. Aubrey will be entitled to receive severance pay equal to 12 months' salary. We may terminate our agreement with Mr. Aubrey without paying severance to Mr. Aubrey for cause, which is defined to include his conviction of, or pleading guilty or no contest to, any felony, his breach of fiduciary duty involving personal profit, his willful failure or refusal to perform his duties, or his committing fraud or embezzlement or any other act of dishonesty against us. Additionally, the agreement provides for non-equity incentive pay, as more fully described in the Grants of Plan-Based Awards-2010 section of this proxy statement.

***Dan Manor***

On December 6, 2007, we entered into an employment agreement with Dan Manor providing that Mr. Manor would serve for three years as the Managing Director of ISS Image Sensing Systems Canada Ltd. Under the agreement, Mr. Manor initially was paid an annualized salary of CDN\$200,000, and he received insurance and other benefits in accordance with our standard employee programs. In addition, Mr. Manor received three weeks vacation per year on an accrual basis. Mr. Manor retired from the Company, and his employment agreement terminated, in December 2010.

Table of Contents***Daniel W. Skites***

On October 21, 2010, we entered into an employment agreement with Daniel W. Skites providing that Mr. Skites will serve at will as our Vice President of Sales and Marketing beginning no later than November 16, 2010. Under the agreement, Mr. Skites is paid an annualized salary of \$172,000, subject to future adjustment by management in its sole and absolute discretion. He receives insurance and other benefits in accordance with our standard employee programs. Under our agreement with Mr. Skites, upon commencing employment, Mr. Skites was granted an option to purchase 15,000 shares and received a \$22,500 signing bonus. In addition, Mr. Skites receives three weeks' vacation per year on an accrual basis and is eligible for bonuses as determined by management. If Mr. Skite's employment is terminated within 18 months of a change in control, our agreement with Mr. Skites provides that he will be entitled to receive severance pay equal to 12 months' salary. Except in the case of a change in control, we may terminate our agreement with Mr. Skites without paying severance.

***Gregory R. L. Smith***

On December 8, 2006, we entered into an employment agreement with Gregory R. L. Smith providing that Mr. Smith will serve at will as our Chief Financial Officer beginning on or about January 15, 2007. Under the agreement, Mr. Smith initially was paid an annualized salary of \$140,000, subject to adjustment by our Compensation and Stock Option Committee in its sole and absolute discretion. In 2011, his salary was adjusted to \$180,000 annually. He receives insurance and other benefits in accordance with our standard employee programs. Under our agreement with Mr. Smith, upon commencing employment, Mr. Smith was granted an option to purchase 25,000 shares. In addition, Mr. Smith receives three weeks' vacation per year on an accrual basis and is eligible for any bonus awarded for achieving corporate financial and strategic objectives as set forth by our Compensation and Stock Option Committee. If Mr. Smith's employment is terminated by us without cause, our agreement with Mr. Smith provides that he will be entitled to receive severance pay equal to six months' salary. We may terminate our agreement with Mr. Smith without paying severance to Mr. Smith for cause, which is defined to include his conviction of, or pleading guilty or no contest to, any felony, his breach of fiduciary duty involving personal profit, his willful failure or refusal to perform his duties, or his committing fraud or embezzlement or any other act of dishonesty against us. Additionally, the agreement provides for non-equity incentive pay, as more fully described in the Grants of Plan-Based Awards-2010 section of this proxy statement.

**Potential Payments upon Termination of Employment or Change in Control**

The table below reflects the amount of compensation to each of the named executive officers other than Dan Manor, who was not entitled to payments upon the termination of his employment, upon termination of employment under the specified circumstances. The amounts shown assume that the termination was effective as of December 31, 2010, include amounts earned through that time and are estimates of the amounts which would be paid out to the executives upon their termination. The actual amounts to be paid out can be determined only at the time of actual separation from our company. Additionally, under each executive's respective employment agreement, and if the executive voluntarily terminates his employment, we may award, subject to our discretion, a pro-rata portion of the incentive pay such executive would have received had he remained employed by us.

| Name                             | Cash Severance<br>Payment | Accrued<br>Vacation<br>Pay | Total     |
|----------------------------------|---------------------------|----------------------------|-----------|
| <b>Kenneth R. Aubrey</b>         |                           |                            |           |
| <i>Retirement or resignation</i> | \$                        | \$ 10,601                  | \$ 10,601 |
| <i>Termination without cause</i> | 245,000                   | 10,601                     | 255,601   |
| <i>Termination for cause</i>     |                           | 10,601                     | 10,601    |
| <i>Death</i>                     |                           | 10,601                     | 10,601    |
| <b>Gregory R. L. Smith</b>       |                           |                            |           |
| <i>Retirement or resignation</i> | \$                        | \$ 12,340                  | \$ 12,340 |
| <i>Termination without cause</i> | 87,500                    | 12,340                     | 99,840    |
| <i>Termination for cause</i>     |                           | 12,340                     | 12,340    |
| <i>Death</i>                     |                           | 12,340                     | 12,340    |

Table of Contents

*Other Post-Employment Payments*

We generally do not provide pension arrangements or post-retirement health coverage for executive officers or other employees. We do not provide any nonqualified defined contribution or other deferred compensation plans.

**RELATED PERSON TRANSACTIONS AND POLICY**

**Related Person Transactions**

Under the asset purchase agreement for our EIS asset purchase in December 2007, the sellers of the EIS assets, consisting of Dan Manor and EIS (which is now known as Mendon Faydan, Inc. and is controlled by Mr. Manor), had an earn-out arrangement over approximately three years. The earn-out was based on earnings from sales of the RTMS line of products that we bought from EIS, less related cost of revenue and operating expenses, depreciation and amortization, and it was calculated annually. The earn-out is complete as of December 31, 2010. Based on the 2008, 2009 and 2010 results for RTMS, Mr. Manor and Mendon Faydan, Inc. were entitled to receive \$1.2 million, \$1.5 million and \$1.7 million in earn-out payments, respectively, each of which we paid to them in March of the following year. The EIS asset purchase agreement was approved by our Board of Directors.

Michael C. Doyle was appointed to the Company's Board of Directors on April 5, 2011. Mr. Doyle is the Chairman of the Board and Chief Executive Officer and owns, directly or indirectly, substantially all of the equity interest of Econolite Group, Inc., a traffic control equipment manufacturer and distributor and the parent company to Econolite Control Products, Inc. (Econolite). The Company has granted to Econolite the exclusive right to manufacture, market and distribute the Company's Autoscope® system in North America, Latin and the Caribbean under the Manufacturing, Distributing and Technology License Agreement dated June 11, 1991 by and between the Company and Econolite, as amended (the Econolite Agreement), which expires in 2028. Under the Econolite Agreement, Econolite pays the Company a royalty on the revenue derived from its sales of the Company's Autoscope system. During the year ended December 31, 2010, Econolite paid \$12.5 million in royalties to the Company, which represented 40% of the Company's 2010 revenue. The Econolite Agreement was negotiated and entered into before Mr. Doyle was appointed to the Company's Board.

**Related Person Transaction Policy**

The Company's Code of Ethics and Business Conduct (the Code) requires that the Company's Board or Audit Committee approve activities that could involve a conflict of interest if undertaken by an associate, which consists of the Company's directors, officers, employees and consultants. These transactions include owning a substantial interest in any competing business or in any outside distributor or customer that does or seeks to do business with the Company; providing services to any outside concern that does business with the Company or competes with the Company; representing the Company in any business transaction with a person or organization in which associates or their immediate family have a personal interest or may derive a benefit; or taking advantage of any business opportunity which may belong to the Company. In considering these transactions under the Code, the Board or the Audit Committee would consider and evaluate information regarding the transaction, including the dollar amounts involved in the transaction. The Board and the Audit Committee did not consider and evaluate the transactions described above involving Mr. Manor and Mr. Doyle under the Code because the Company entered into these transactions before Mr. Manor or Mr. Doyle became an associate of the Company.

Table of Contents

**AUDIT COMMITTEE REPORT**

*Notwithstanding anything to the contrary set forth in any of our previous or future filings under the Securities Act of 1933 or the Securities Exchange Act of 1934 that might incorporate future filings by reference, including this proxy statement, in whole or in part, the following report of the Audit Committee shall not be deemed to be incorporated by reference into any such filings and shall not otherwise be deemed filed under such acts.*

**Audit Committee Report**

In 2010, the Audit Committee of the Board of Directors was composed of the following non-employee directors: Sven A. Wehrwein (Chair), James W. Bracke and Michael G. Eleftheriou. The members of the Audit Committee in 2010 were and now are independent for purposes of the listing standards of The NASDAQ Capital Market and the rules of the Securities and Exchange Commission. Our Board of Directors identified Messrs. Wehrwein, Bracke and Eleftheriou as audit committee financial experts under the rules of the Securities and Exchange Commission. The Audit Committee operates under a written charter adopted by the Board of Directors.

The Audit Committee oversees Image Sensing Systems, Inc.'s financial reporting process on behalf of the Board of Directors and selects our independent registered public accounting firm. Management has the primary responsibility for the financial reporting process, including our system of internal controls. Our independent registered public accounting firm is responsible for performing an independent audit of our consolidated financial statements in accordance with auditing standards generally accepted in the United States and issuing a report on our financial statements. The Audit Committee discusses with our independent registered public accounting firm the overall scope and plans for its audits and meets with our independent registered public accounting firm, with and without management present, to discuss the results of its examinations, its evaluations of our internal controls, and the overall quality of our financial reporting.

In fulfilling our oversight responsibilities, the Audit Committee has met and held discussions with management and our independent registered public accounting firm. The Audit Committee reviewed and discussed the financial statements with management and our independent registered public accounting firm, including a discussion of the application of accounting principles generally accepted in the United States, the reasonableness of significant judgments, and the clarity of disclosures in the financial statements. The Audit Committee also has discussed with our independent registered public accounting firm the firm's independence from management, including whether the provision of non-audit services is compatible with maintaining the firm's independence, and matters required to be discussed by the Statement on Auditing Standards No. 61, as amended (AICPA, *Professional Standards*, Vol.1. AU section 380), as adopted by the Public Company Accounting Oversight Board in Rule 3200T. The Audit Committee received the written disclosures and the letter from the independent accountant required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with the independent accountant the independent accountant's independence.

Based on the review and discussions referred to above, the Audit Committee recommended to the Board of Directors (and the Board has approved) that the audited financial statements be included in Image Sensing Systems, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2010 filed with the Securities and Exchange Commission. The Committee has selected Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2011.

By the Audit Committee

Sven A. Wehrwein, *Chair*

Michael G. Eleftheriou

James W. Bracke

23

Table of Contents

**PAYMENT OF FEES TO OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

**Audit Fees**

Audit fees, including aggregate fees for the audit of our annual financial statements, reviews of our quarterly financial statements and reviews of filings with the Securities and Exchange Commission, were \$222,447 and \$135,624 for fiscal 2010 and 2009, respectively. The 2010 fees included services performed in conjunction with our common stock offering and our acquisition of CitySync Limited.

**Audit-Related Fees**

There were no audit-related fees for fiscal 2010 and 2009.

**Tax Fees**

Tax fees for tax consulting and tax return preparation were \$-0- and \$40,723 for fiscal 2010 and 2009, respectively.

**All Other Fees**

We paid no other fees to our independent registered public accounting firm in 2010 or 2009.

**Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services Provided by Our Independent Registered Public Accounting Firm**

The Audit Committee is responsible for appointing, setting compensation for and overseeing the work of our independent registered public accounting firm. The Audit Committee has established a policy for pre-approving the services provided by our independent registered public accounting firm in accordance with the auditor independence rules of the Securities and Exchange Commission. This policy requires the review and pre-approval by the Audit Committee of all audit and permissible non-audit services provided by our independent registered public accounting firm and an annual review of the financial plan for audit fees.

To ensure that auditor independence is maintained, the Audit Committee annually pre-approves the audit services to be provided by our independent registered public accounting firm and the related estimated fees for such services, as well as the nature and extent of specific types of audit-related, tax and other non-audit services to be provided by our independent registered public accounting firm during the year.

As the need arises, other specific permitted services are pre-approved on a case-by-case basis during the year. A request for pre-approval of services on a case-by-case basis must be submitted by our Chief Financial Officer, providing information as to the nature of the particular service to be provided, estimated related fees and management's assessment of the impact of the service on the auditor's independence. The Audit Committee has delegated to its Chair pre-approval authority between meetings of the Audit Committee. Any pre-approvals made by the Chair must be reported to the Audit Committee. The Audit Committee will not delegate to management the pre-approval of services to be performed by our independent registered public accounting firm.

All of the services provided by our independent registered public accounting firm in fiscal 2010 and 2009 were approved by the Audit Committee under its pre-approval policies.



Table of Contents

**PROPOSAL 2 - RATIFICATION OF APPOINTMENT OF OUR  
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

Grant Thornton LLP audited our consolidated financial statements for the fiscal year ended December 31, 2010. The Audit Committee has appointed Grant Thornton LLP as our independent registered public accounting firm for the year ending December 31, 2011.

Although we are not required to do so, we are submitting the appointment of Grant Thornton LLP to serve as our independent registered public accounting firm for the fiscal year ending December 31, 2011 for ratification in order to ascertain the views of our shareholders on this appointment. If the appointment is not ratified, the Audit Committee will reconsider its selection. A representative of Grant Thornton LLP is expected to be present at the 2011 annual meeting. The representative will have an opportunity to make a statement at the meeting and will be available to respond to appropriate questions from shareholders.

**The Board of Directors recommends that you vote FOR ratification of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2011. Proxies will be voted FOR ratifying this appointment unless otherwise specified.**

**SHAREHOLDER PROPOSALS FOR THE 2012 ANNUAL MEETING**

Any proposal by a shareholder to be included in our proxy statement for the 2012 annual meeting must comply with the applicable rules and regulations of the Securities and Exchange Commission and must be received at our principal executive offices, 500 Spruce Tree Centre, 1600 University Avenue West, St. Paul, Minnesota 55104, no later than December 19, 2011. Pursuant to the rules of the Securities and Exchange Commission, proxies solicited by management for the next annual meeting may grant management the authority to vote in its discretion on any proposal submitted by a shareholder otherwise than through inclusion in the proxy statement for the meeting, unless we have received notice of the shareholder proposal at our principal executive offices on or before March 14, 2012.

**ANNUAL REPORT TO SHAREHOLDERS**

We are including with this proxy statement our Annual Report to Shareholders for the year ended December 31, 2010, which incorporates our Annual Report on Form 10-K less certain exhibits. Shareholders may request a complete copy of our Annual Report on Form 10-K for fiscal 2010 with exhibits, as filed with the Securities and Exchange Commission, by writing to Image Sensing Systems, Inc., 500 Spruce Tree Centre, 1600 University Avenue West, St. Paul, Minnesota 55104, Attention: Chief Financial Officer.

**OTHER MATTERS**

We know of no matters other than those that are described in this proxy statement to come before the 2011 annual meeting of shareholders. However, if any other matters are properly brought before the meeting, one or more persons named in the enclosed proxy card or their substitutes will vote in accordance with their best judgment on such matters.

James Murdakes  
*Chairman of the Board*

Dated: April 28, 2011

Table of Contents

**IMAGE SENSING SYSTEMS, INC.**

**ANNUAL MEETING OF SHAREHOLDERS**

**Wednesday, May 25, 2011**

**3:30 p.m. Central Time**

**Embassy Suites  
175 E. 10th St.  
St. Paul, Minnesota 55101**

**FOLD AND DETACH HERE AND READ THE REVERSE SIDE**

**PROXY**

**IMAGE SENSING SYSTEMS, INC.**

**This proxy is solicited on behalf of the Board of Directors**

The undersigned, having received the Notice of Annual Meeting and Proxy Statement dated April 28, 2011, revoking any proxy previously given, hereby appoint(s) Kenneth R. Aubrey and Gregory R. L. Smith as proxies (each with the power to act alone and with the power of substitution and revocation) to represent the undersigned and to vote, as designated on the reverse side, all shares of common stock of Image Sensing Systems, Inc. which the undersigned is entitled to vote at the Annual Meeting of Shareholders to be held at 3:30 p.m. Central Time on Wednesday, May 25, 2011 at the Embassy Suites, 175 E. 10th St., St. Paul, Minnesota, and at any adjournment or postponement thereof.

**PLEASE MARK, SIGN AND DATE THIS PROXY ON THE REVERSE SIDE AND RETURN IT IN THE ENCLOSED POSTAGE-PREPAID ENVELOPE.**

*See reverse side for voting instructions.*

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Table of Contents

**FOLD AND DETACH HERE AND READ THE REVERSE SIDE**

**This proxy, when properly executed, will be voted as directed by the undersigned. If no direction is given, this proxy will be voted FOR all nominees for director, FOR the ratification of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the 2011 fiscal year, and in the discretion of the named proxies on all other matters.** Please mark your votes like this **X**

|                           |  |   |  |                       |                       |                       |
|---------------------------|--|---|--|-----------------------|-----------------------|-----------------------|
| 1. Election of directors: | FOR all nominees listed below (except as specified below). | WITHHOLD AUTHORITY to vote for all nominees listed below. | 2. To ratify the appointment of Grant Thornton LLP as the independent registered public accounting firm of the company for 2011. | FOR                   | AGAINST               | ABSTAIN               |
|                           | <input type="radio"/>                                      | <input type="radio"/>                                     |  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- |                           |                           |
|---------------------------|---------------------------|
| 01 Kenneth R. Aubrey      | 05 Panos G. Michalopoulos |
| 02 James W. Bracke        | 06 James Murdakes         |
| 03 Michael C. Doyle       | 07 Sven A. Wehrwein       |
| 04 Michael G. Eleftheriou |                           |

**(Instructions: To withhold authority to vote for any indicated nominee, strike a line through that nominee's name in the list above.)**

**COMPANY ID:**

**PROXY NUMBER:**

**ACCOUNT NUMBER:**

**Signature**

**Signature**

**Date**

PLEASE DATE AND SIGN name(s) exactly as shown on this proxy card. When shares are held by joint tenants, both should sign. When signing as attorney, executor, administrator, trustee or guardian, please give full title as such. If a corporation, please sign in full corporate name by President or other authorized officer. If a partnership, please sign in partnership name by authorized person.